Comprehensive Hospital Abstract Reporting System (CHARS)

Procedure Manual for Submitting Discharge Data

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For more information or additional copies of this manual contact:

Center for Health Statistics
Hospital and Patient Data Systems
Comprehensive Hospital Abstract Reporting System (CHARS)
1102 Quince Street SE
Olympia, Washington 98504-7811

(360) 236-4223
FAX (360) 664-8579

If you have any questions or need more information pertaining to the information in this manual, or would like additional copies of this manual, please contact:

Jeannette Neibert, CHARS Manager
(360) 236-4223
FAX: (360) 664-8579
Email: Jeannette.Neibert@doh.wa.gov

Kim Faun Dunlap, CHARS Processing Representative
(360) 236-4208
FAX: (360) 664-8579
Email: Kim.Dunlap@doh.wa.gov

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Introduction

This manual outlines procedures for submitting Comprehensive Hospital Abstract Reporting System (CHARS) discharge data to the Department of Health (DOH). The rules for reporting hospital inpatient discharge data and the authority for reporting requirements are found in the Washington Administrative Code (WAC) 246-455. (See Appendix A.)

The Manual is organized as follows:

- Introduction
- CHARS overview
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Organization and Background

The CHARS system was established in law by the 1984 Legislature. These data were previously collected by the Washington State Hospital Commission which was sunsetted in June, 1989. The department was created by the Legislature effective July 1, 1989. In October, 1989, the Legislature authorized the department to continue hospital based data collection, storage and retrieval systems as stated in Engrossed Senate Bill (ESB) 6152.

The CHARS system is currently authorized under Revised Code of Washington (RCW) 43.70.052 (Appendix B) and is implemented by Washington Administrative Code (WAC) 246.455. In the department, the Hospital and Patient Data Systems (HPDS) is responsible for performing this function. The mission of HPDS is to collect, maintain, analyze, and disseminate hospital patient discharge and financial utilization data that are useful in conducting public health work and in improving the quality and cost effectiveness of health care for all people in the state of Washington.

Purpose and Objectives

The purpose of the CHARS system is to provide public health personnel, consumers, purchasers, payers, providers, and researchers useful information by which to make informed decisions on health care. The CHARS system provides those concerned with the development of public policy with information necessary to analyze many significant health care issues. Specifically, the department uses the CHARS data system to:

- identify and analyze health trends related to patients' hospitalizations;
- establish statewide diagnosis related groups (DRG) weights;
- create hospital specific case mix indices; and
- identify and quantify issues related to health care access, quality, and cost containment.

Your conscientious efforts in providing accurate data to CHARS enables health providers, policy makers, managers and researchers in our state to better understand our health care problems and to formulate effective solutions for these problems.

CHARS Overview

From the conception of the CHARS system hospital inpatient data were collected using the Uniform Billing (UB) 82 format. On October 1, 1993 the department began data collection in the UB92 format. The system was converted from a mainframe application to a relational database operating system. In August, 1994, the 1993 data were released in the UB92 format.

The CHARS data application is owned and operated by the department and accomplishes the following:

- Provides the department and the health care community with accurate and timely data through mandated requirements.
- Efficiently and accurately accommodates the processing volumes and performance criteria outlined.
- Responds to current and pending Federal UB92/Centers for Medicare and Medicaid Services (CMS) (formerly Health Care Financing Administration (HCFA)) reporting requirements in a timely manner.
- Improves analysis and management capabilities.
- Supports state-level data capture and compilation, and access to an on-line database for query and analysis.
- Manages data flow and processing to accurately track each discharge record or correction from time of receipt to final processing.
- Reduces problems related to data submission.
- Provides flexibility in custom application changes to accommodate future reporting and processing requirements.
- Increases opportunity for information sharing with other related databases.
- Assists with the assessment and evaluation process as outlined in the Washington State Public Health Improvement Plan.
- Provides accurate and timely reports as specified on each sample report.
- Ensures capability of operating on the department's system standards.
- Ensures confidentiality of all patient information.

Current System Functions

The CHARS system is designed to accommodate data elements from the Medicare provider-billing file and record formats for UB92 (CMS 1450 Version 4 and/or Version 050 flat file). These inpatient data are processed to produce a range of products. The department contracts with a contractor to process these data. The system includes the following functions:

- **Data Collection:** Hospitals prepare their patient data to conform to the CHARS system's operating structure. The data are submitted to the contractor by tape, cartridge or file transfer protocol (FTP). The hospitals' patient data are added to the system through a data load process at the contractor's site.
- **Data Editing:** The CHARS system uses edits identified by the department. It also implements the Medicare Code Edits (MCE) that are used for editing clinical data. (See Appendix G.) Records that fail the edit function produce worksheets (audit turnaround documents) that are returned to the hospital for correction. Incorrect records remain in the production system pending hospital review and correction.
- **Data Correction:** Worksheets with corrected data are returned by the hospitals and the CHARS staff enters corrections. These records, along with newly submitted data, are then reaudited. The process continues until all data are accepted. Hospitals can resubmit a complete period with corrected data on tape, cartridge, or FTP. If corrections are submitted, the specific period of data in production is deleted and is replaced by the new data. Previous corrections are lost. CHARS uses on-line editing for corrections and adjustments (hospital changes made to the accepted data). When the hospital's entire submission for a given period (half year, full year) is accepted the database is closed. Hospitals certify quarterly that their data are 95% correct for inpatient discharges and dollars.
- **On-Line Data Storage:** The system stores 18 months of data on-line for corrections and adjustments. Data older than 18 months can be put back into production upon request. Changes are not made to the database for closed years.
- **Data Reporting:** The released full year data are stored on CD-ROM in a data library in the department and at the contractor's site. Standard reports are generated from these data. Data requests and other ad hoc reports and analyses are performed using these files. In the department ad hoc query capability is available on proprietary software through the current contractor. Half year and full year public data are released and made available for sale on CD-ROM. Confidential data are also released and can be used for research but only when the request is approved by the Human Research Review Board.

The department's contractor is responsible for the computer-related elements, receiving and processing data. The department is responsible for the liaison with the hospitals, entering data corrections, and distributing reports to the hospitals and the health care community.

System Description

The CHARS system is designed to collect, edit, process, store, retrieve and report data using CMS 1450 UB92 guidelines. Following are characteristics of the CHARS data processing system:

1. Collects hospital inpatient discharges on Bill Types 111, 121 and 181.
2. Applies patient clinical and financial audits (edits).
3. Sets error threshold for hospitals as a mechanism to control data quality. (At present the department accepts 60% but strives for 5%.)
4. Applies data grading mechanisms using Medicare Code Edits (MCE) and the department's audits.
5. Generates Data Quality Reports that allow the submitting facility to review the quality and completeness of data in a submission (e.g., Executive Report, DRG, etc.).
6. Allows for data correction and adjustment through on-line record level updates or entire batch resubmission.
7. Provides the ability to delete and add a discharge record manually.
8. Uses an event-driven automated backup control system allowing both the department and the contractor to track the progress and status of data submissions.
9. Assigns CMS MDC and DRG elements.
10. Provides security to prevent accidental removal or modification of data and provides protection of confidential data.
11. Allows customization of system functions to meet the department's needs (e.g., change physician numbers).
12. Uses a table-driven design methodology and relational database technology in an open operating environment.

The CHARS System also does:

13. Input file validation—accommodates the department's specific data submission requirements including 33 elements, internal consistency checks, revenue code charges, and total record balancing.
14. Reformatting (conversion)—customized to include standard data elements (e.g. could add birth weight, county of residence code).
15. Value added fields—application of Washington State weights, case mix indices, severity level using Refined DRG (RDRG).
16. Data auditing (editing)—includes application of MCE, the department audits, and validation of three types of physician numbers.
17. Data grading—can exclude audits, for example, Audit 8820, Charges per Day <$500, can be turned off for hospitals who request it to be turned off because they have many short stay babies and Swing Bed patients that have charges <$500/day.
18. Data Quality Reports—primary payer codes, total charges ranges, etc.
19. Transfer data—accommodates the creation and maintenance of the department specific end-user products (e.g., Standard Reports).

UB92 Information

Data Elements Collected in CHARS

The following data elements are collected in the CHARS database on each inpatient discharge:

- **Patient control number** (PCN) (Form Locator Field (FL) # 3)
- **Type of bill** (FL #4)
- **Statement covers period** (FL #6)
- **Patient identifier** (FL #12)
- **Patient zip code** (FL # 13
- **Patient birthdate** (FL # 14)
- **Patient sex** (FL #15)
- **Admission date** (FL #17)
- **Type of admission** (FL # 19)
- **Source of admission** (FL # 20)
- **Patient status** (FL # 22)
- **Revenue codes** up to 40 if applicable (FL #42)
- **Units of service** (FL #46)
- **Total charges** (FL #47)
- **Payer identification # 1** (FL # 50.A)
- **Payer identification # 2** if applicable (FL #50.B)
- **Principal diagnosis code** (FL # 67)
- **Other diagnoses codes** up to 8 if applicable (FL #68-75)
- **E-Code** (External cause of injury code) if applicable (FL # 77)
- **Principal procedure code** if applicable (FL # 80)
- **Other procedure codes** up to 5 if applicable (FL #81.A-E)
- **Attending physician ID** (FL #82)
- **Other physician ID** if applicable (FL #83)

Following is a listing of each data element in the UB92 format with the CHARS required elements marked. After the listing is a description of each required element and suggestions for submitting the element.

Table 1
UB-92 Data Elements

Form Locator Number	Data Elements	CHARS Required	NOT Required
1.	Provider Name, Address, Telephone Number		x
2.	Unlabeled Field		x
3.	Provider's Patient Control Number	x	
4.	Type of Bill	x	
5.	Federal Tax Number		x
6.	Statement Covers Period	x	
7.	Covered Days		x
8.	Non-Covered Days		x
9.	Coinsurance Days		x
10.	Lifetime Reserve Days		x
11.	Unlabeled Field - State Use		x
12.	Patient Name *(Patient Identifier)	x	
13.	Patient Address *(Zip Code Only)	x	
14.	Patient Birthdate	x	
15.	Patient Sex	x	
16.	Patient Marital Status		x
17.	Admission Date	x	
18.	Admission Hour		x
19.	Type of Admission	x	
20.	Source of Admission	x	
21.	Discharge Hour		x
22.	Patient Status	x	
23.	Medical/Health Record Number		x
24.-30.	Condition Codes		x
31.	Unlabeled Field		x
32.-35.	Occurrence Codes and Dates		x
36.	Occurrence Span Codes and Dates		x
37.	Internal Control Number (ICN)		x
38.	Responsible Party Name and Address		x
39.-41.	Value Codes and Amounts		x
42.	Revenue Code	x	
43.	Revenue Description		x
44.	HCPCS/Rates		x
45.	Service Date		x
46.	Units of Service	x	

Form Locator Number	Data Elements	CHARS Required	NOT Required
47.	Total Charges	x	
48.	Non-Covered Charges		x
49.	Unlabeled Field		x
50.ABC	Payer Identification (two if applicable)	x	
51.	Provider Number		x
52.	Release of Information Certification Indicator		x
53.	Assignment of Benefits Certification Indicator		x
54.	Prior Payments—Payers and Patient		x
55.	Estimated Amount Due		x
56.	DRG Number and Grouper Number ID		x
57.	Unlabeled Field		x
58.	Insured's Name		x
59.	Patient's Relationship to Insured		x
60.	Health Insurance Claim Identification Number		x
61.	Insured Group Name		x
62.	Insurance Group Number		x
63.	Treatment Authorization Code		x
64.	Employment Status Code		x
65.	Employer Name		x
66.	Employer Location		x
67.	Principal Diagnosis Code	x	
68.-75.	Other Diagnosis Codes (if applicable)	x	
76.	Admitting Diagnosis		x
77.	External Cause of Injury Code (E-Code) (if applicable)	x	
78.	Principal Diagnosis Code Side of Body		x
79.	Procedure Coding Method Used		x
80.	Principal Procedure Code (if applicable)	x	
81. A-E	Other Procedure Codes (if applicable)	x	
82.	Attending Physician ID	x	
83.	Other Physician ID (if applicable)	x	
84.	Remarks		x
85.	Provider Representative Signature		x
86.	Date Bill Submitted		x

UB92 Data Elements Required for CHARS

UB92 Form Locator
Field Number (FL#)

3. **Provider's Patient Control Number (PCN):** A patient's unique number assigned by the hospital to facilitate retrieval of individual case records and financial records. Each PCN can have up to 20 characters. It can be an alpha, numeric or alpha/numeric and contain dashes (- -). The hospital must assign a unique number to each record.

4. **Type of Bill:** A code indicating the specific type of bill. Values 111, 121, & 181 are accepted:

   Type of facility - first digit: 1 = Hospital

   Bill classification - second digit: 1 = Inpatient

   2 = Inpatient (Medicare Part B)

   8 = Inpatient (Swing Beds)

   Frequency - third digit: 1 = Admit through discharge claim

   111 Hospital Inpatient (Medicare Part A)

   121 Hospital Inpatient (Medicare Part B Only)

   181 Hospital Swing Beds

6. **Statement Covers Period (From-Through):** The beginning and ending dates of the period included on the UB92 (MMDDYY).

12. **Patient Name (Identifier):** Requires first two letters of patient's last name, first two letters of the patient's first name plus the birth date in the MMDDYYYY format. For Ann Johnson born October 28, 1963, the identifier would be JOAN10281963.

    If the first name is unknown, but you know the initial, use the first initial of the first name, the first initial of the middle name, a dash (-), or a period (.). For B. Donna Smith born June 6, 1898 the identifier could be SMBD06061898, SMB-06061898, or SMB.06061898.

    When a patient's last name is a single letter the patient identifier is the patient's last name plus the first three letters of the first name plus the birth date. For example, last name is Y, first name is Tizon, birth date is 10/31/72, it would be YTIZ10311972 or Y-TI10311972.

    For newborns without a first and middle name at the time of discharge or transfer, use the first two letters of the last name, (JO for Johnson), "BA" (baby), dashes (--), or periods (..) for the first name plus the birth date. (JOBA10101996, JO—10101996, or JO..10101996).

For twins, triplets or other multiple births use the first two letters of the last name, a dash (-) or period (.) in the first name field and A, B, C, in the middle initial field (JO-A10101996. JO-B10101996, JO-C10101996.

13. **Patient Address (Zip Code Only):** The patient's home address zip code. Submit five numbers, plus four if available. If the Zip Code is unknown, assign the hospital's Zip Code. When the patient is from a foreign country use the first five letters of the country's name. This field is either numeric or alpha, not a combination.

14. **Patient Birth date:** The date of birth of the patient. Format must be CCYYMMDD. If unknown, use June 30 of the estimated year.

15. **Patient Sex:** The sex of the patient as recorded at date of admission or start of care. Use "M" (Male) or "F" (Female).

17. **Admission Date:** The date the patient was admitted to the hospital for inpatient care. CCYYMMDD

19. **Type of Admission:** A code indicating the priority of this admission. Values 1-4 are accepted.

1 - Emergency	The patient required immediate medical intervention as a result of severe, life threatening or potentially disabling conditions. Generally the patient was admitted through the emergency room.
2 - Urgent	The patient required immediate attention for the care and treatment of a physical or mental disorder. Generally the patient was admitted to the first available and suitable accommodation.
3 - Elective	The patient's condition permits adequate time to schedule the availability of a suitable accommodation.
4 - Newborn	A baby born within this facility. Use of this code necessitates the use of Special Source of Admission Code. See Form Locator 20.

20. **Source of Admission:** A code indicating the source of this admission. Values 1-9 are accepted. If type of admission is "4", Newborn, use the special source of admission codes with values 1-4.

1 - Physician Referral	The patient was admitted to his facility upon the recommendation of his or her personal physician.
2 - Clinic Referral	The patient was admitted to this facility upon the recommendation of this facility's clinic physician.
3 - HMO Referral	The patient was admitted to this facility upon recommendation of a health maintenance organization (HMO) physician.

4 - Transfer from a Hospital	The patient was admitted to this facility as a transfer from an acute care facility where he or she was an inpatient.
5 - Transfer from a SNF	The patient was admitted to this facility as a transfer from a skilled nursing facility (SNF) where he or she was an inpatient (including swing-beds and distinct part SNF).
6 - Transfer from Another Health Care Facility	The patient was admitted to this facility from a health care facility other than an acute care facility or a skilled nursing facility (SNF). This includes transfers from nursing homes, long term care facilities and skilled nursing facility patients that are at a non-skilled level of care.
7 - Emergency Room	The patient was admitted to this facility upon the recommendation of this facility's emergency room physician.
8 - Court/Law Enforcement	The patient was admitted to this facility upon the direction of a court of law, or upon the request of a law enforcement agency representative.
9 - Information Not Available	The means by which the patient was admitted to the hospital is not known.

Code Value used when Type of Admission equals "4", Newborn

1 Normal Delivery	A baby delivered without complications.
2 Premature Delivery	A baby delivered with time and/or weight factors qualifying it for premature status.
3 Sick Baby	A baby delivered with medical complications, other than those relating to premature status.
4 Extramural Birth	A newborn delivered in a non-sterile environment.

22. **Patient Status:** A code indicating patient status as of the ending service date of the period covered in this record. Values 1-8, 20, 50, 51, and 61-63 are accepted.

    01 Discharged to home or self care (routine discharge)

    02 Discharged/transferred to another short-term general hospital for inpatient care

    03 Discharged/transferred to skilled nursing facility (SNF)

04 Discharged/transferred to an intermediate care facility (ICF)

05 Discharged/transferred to another type of institution for inpatient care or referred for outpatient services to another institution

06 Discharged/transferred to home under care of home health service organization

07 Left against medical advice or discontinued care

08 Discharged/transferred to home under care of a Home IV provider

20 Expired

50 Hospice—Home

51 Hospice—Medical Facility

61 Discharge/transfer within this institution to a hospital based Medicare approved Swing Bed

62 Discharged/transferred to another Rehab unit or facility

63 Discharged/transferred to another Long Term Care facility

42. **Revenue Codes:** A code that identifies a specific accommodation and/or ancillary charge. Accommodation codes are 10x to 21x. Professional fees and outpatient revenue codes are not accepted in CHARS and will result in a worksheet when included. For the list of accepted and unaccepted revenue codes see Appendix D.

    A combined total of 40 line items, including Accommodation and Ancillary Revenue Codes, are accepted in CHARS. If more line items are submitted, the first 40 line items are included and the additional line items are dropped. This will result in the creation of a worksheet because the total accommodation charges and the total ancillary charges would not equal the total charges. If necessary, hospitals can bundle like revenue codes (e.g. 30x Laboratory) into one revenue code and combine the units of service and total dollars for that revenue code.

    The system does not accept a negative line item charge. If one is included, a worksheet will be generated and it will be necessary to adjust the total charges to reflect the credit and delete that revenue code line item from the record. A copy of the UB92 may be requested by CHARS staff to complete the correction.

    Total charges of all accommodation and ancillary charges should be the last line item listed on the ancillary record type as revenue code “001.”

46. **Units of Service:** A quantitative measure of services rendered by revenue category to or for the patient to include items such as number of accommodation days. CHARS requires the same units as Medicare does, the units of service for accommodation days should equal the length of stay. Where units of service are not required by Medicare, leave blank, or enter the units of service used.

47. **Total Charges:** Total charges pertaining to the related revenue code for the current billing period as entered in the statement covers period.

Total Charges of all Accommodation and Ancillary charges are listed on Ancillary record type 60 as Revenue Code "001."

50.A,B **Payer Identification:** Number identifying each payer group from which the hospital might expect some payment for the bill. Values for DOH are:

001 Medicare

002 Medicaid (Washington State Department of Social and Health Services) [DSHS] (Healthy Options)

004 HMO (Health Maintenance Organization) (e.g. Kaiser, Group Health, Molina, Basic Health Plan)

006 Commercial Insurance (e.g. Mutual of Omaha, Safeco)

008 Worker's Compensation (includes state fund, self-insured employers, and Labor & Industries crime victim's claims).

009 Self Pay

610 Health Care Service Contractors (e.g. Premera Blue Cross, KPS)

625 Other Government Sponsored Patients (e.g. TRI-CARE, Indian Health)

630 Charity Care (as defined in WAC 246-453-010)

Secondary Payer: Use the same number values as above.

67. **Principal Diagnosis Code:** The ICD-9-CM code describing the principal diagnosis (i.e., the condition established after study to be chiefly responsible for occasioning the admission of the patient for care).

68-75. **Other Diagnoses Codes** (if applicable): The ICD-9-CM diagnoses codes corresponding to additional conditions that co-exist at the time of admission, or develop subsequently, and which have an effect on the treatment received or the length of stay. Up to eight codes are accepted.

77. **External Cause of Injury (E-code):** The ICD-9-CM code for the external cause of an injury, poisoning, or adverse effect. One code is accepted in the UB92 format. An E-code is required for all 800-900 ICD-9-CM codes except 909.3 and 996-999.9. When an E-code is not available, a worksheet will be created. This is an opportunity for the CHARS hospital representative to review the chart, and if none is available, write OK on the worksheet and return it to CHARS. It will be forced into the system.

80. **Principal Procedure Code** (if applicable): The code that identifies the principal procedure performed during the period covered by this record.

81.A-E **Other Procedure Codes** (if applicable): The codes identifying all significant procedures other than the principal procedure. Report those that are most important for the episode of care and specifically any therapeutic procedures closely related to the principal diagnosis. Up to five codes are accepted.

82. **Attending Physician ID:** The number of the licensed physician who would normally be expected to certify and recertify the medical necessity of the services rendered and/or who has primary responsibility for the patient's medical care and treatment. CHARS accepts the Medicaid number, DOH number, or UPIN.

The Medicaid (DSHS) number is a seven digit number (1864267, 8923655). A number beginning with "7" is a clinic number and is not accepted.

The DOH state license number is a digit number preceded by "MD0 (zero)." CHARS accepts the last seven digits and the number begins with a "0 (zero)" (0009432).

The Medicare Unique Physician Identification Number (UPIN) begins with an alpha character and has five digits (A69345). RES000and INT000 are not accepted.

83. **Other Physician ID:** The number of the licensed physician who performed the principal procedure or performed the surgical procedure most closely related to the principal diagnosis. It may or may not be the same as the attending physician depending on whether the attending physician performed the procedure. CHARS accepts the Medicaid number, DOH number, or UPIN.

All records containing a procedure code must have an other physician number listed or a worksheet is created.

Additional Information

Medicare Provider Number

Hospitals with Medicare approved units (e.g., Acute Care Unit, Extended Care Unit, Psychiatric Unit, Rehabilitation Unit, Swing Beds) must use the appropriate Medicare Provider Number for all patients discharged from the unit. A separate processing report is created for each unit.

Swing Beds

The Medicare Provider Number should reflect that it is a Medicare certified swing bed unit. CHARS will accept the "181" swing bed Type of Bill.

Skilled Nursing Beds

CHARS does not collect discharges of skilled nursing beds. They should not be submitted to CHARS.

Mothers and Babies

Hospitals are to submit separate discharge records for mother and baby. All babies born in the hospital, even if the baby stays less than 24 hours, must be reported as a discharge to CHARS.

Late Charges and Adjustments

Late charges and adjustments for individual records can be made electronically when an entire period of time (a month) can be deleted and resubmitted with the corrections made. All prior corrections made for the deleted month will be lost. The adjustment form should be sent to CHARS with the information to be adjusted for individual records, and it will be keyed by CHARS staff. (See Appendix E-1.) A computer printout or typed page containing the PCN as sent to CHARS on data submission, along with Birthdate, Admit Date, Discharge Date, and information to be adjusted may be submitted. It should be double spaced and have no more than 20 items per page.

Processing Reports and Worksheets

Keeping the UB92s available until you receive the processing report will help you find the records that need correction, records that are accepted, or records that are duplicates. Keeping a copy of the worksheets you have corrected will allow you to check the records you have corrected. Correcting the monthly data should result in error free quarterly reaudit reports.

Guidelines For Submitting E Codes

External causes of injury and poisoning (E codes) classify environmental events, circumstances, and other conditions as the cause of injury, poisoning, and other adverse effects. Codes E800-E999 should be used when applicable and in addition to a code from the main body of the classification system indicating the nature of the condition.

Effective with hospital patient discharges occurring on and after January 1, 1989, hospitals began reporting up to two ICD-9-CM E codes to CHARS. Effective October 1, 1993, the UB92 format included Form Locator # 77, E Code, and the state now requires one E code if applicable. The 1993 and later data are released with one E code.

E codes are accepted for all diagnoses when applicable. Hospitals are not required to, but may, report E codes for diagnoses codes 909.3, Late effects of complications of surgical and medical care, and 996.0-999.9, Complications of surgical and medical care not elsewhere classified.

All hospital units (Acute, Bone Marrow, Extended Care, Psych, Rehab, and Swing Bed) should report E codes.

CHARS Audit 8282, Diagnosis indicates trauma or poisoning but no E Code is present, creates a worksheet if one of the nine diagnoses is in the 800-999 range and an E code is not present. CHARS Audit 1286, An E code cannot be used as the principal diagnosis, is created when an E code is listed as the principal diagnosis. When these audits occur a worksheet is created and returned to the hospital for addition of the E code. If the information is not available, and the coder is unable to assign an E code, write OK on the worksheet and return it to CHARS. Worksheets are not generated for codes 909.3 and 996.0-999.9.

A hospital that admits the patient for the codes 800-999 is required to submit the E code. A hospital that receives the patient as a transfer for the same initial injury is not required to submit an E code. Because Form Locator # 20 on the UB92 can indicate transfer as source of admission, users of data can recognize that the patient was a transfer and the E code was excluded.

Admission to a Rehab Unit or Hospital can be coded using the “Late Effect” E code if applicable. If the patient is transferred to a Rehab Unit or Hospital, and it is a continuation of the initial injury, an E code would not be required.

General E Code Coding Guidelines... (Taken from Coding Clinic, Fourth Quarter, 1996)

An E code can never be a principal (first listed) diagnosis.

If two or more events cause separate injuries, an E code should be assigned for each cause. (CHARS requires one E code) The first listed E code will be selected in the following order:

- E codes for child and adult abuse take priority over all other E codes (see Child and adult abuse guidelines below).
- E codes for cataclysmic events take priority over all other E codes except child and adult abuse.
- E codes for transport accidents take priority over all other E codes except cataclysmic events and child and adult abuse.

The first listed E code should correspond to the cause of the most serious diagnosis due to an assault, accident, or self-harm, following the order of hierarchy listed above.

Child and Adult Abuse Guidelines

When the cause of an injury or neglect is intentional child or adult abuse (995.50-995.59, 995.80-995.85), the first listed E code should be assigned from categories E960-E968. Homicide and injury purposely inflicted by other persons (except category E967). An E code from category E967, Child and adult battering and other maltreatment should be added as an additional E code to identify the perpetrator, if known.

In cases of neglect when the intent is determined to be accidental E904.0, Abandonment or neglect of infant and helpless person, should be the first listed E code.

Unknown or Suspected Intent Guidelines

If the intent (accident, self-harm assault) of the cause of an injury or poisoning is unknown or unspecified, code the intent undetermined E-980-E989.

If the intent (accident, self harm, assault) of the cause of an injury or poisoning is questionable, probable or suspected, code the intent as undetermined E980-E989.

Undetermined Cause

When the intent of an injury of poisoning is known, but the cause is unknown, use codes E928.9, Unspecified accident, E985.9, Suicide and self-inflicted injury of unspecified means, and E968.9, Assault by unspecified means.

These codes should rarely be used as the documentation in the medical record, in both the inpatient and outpatient settings should normally provide sufficient detail to determine the cause of the injury.

Certification Process

The requirement for certification of CHARS data is in WAC 246-455-090. “The department shall furnish each hospital a report of its quarterly discharge data contained in the department’s discharge data system. The chief executive officer (CEO) of the hospital shall, within fourteen calendar days of receipt of the report, certify that the information contained in the department’s discharge data system is complete and accurate to within 95% of the total discharges and total charges experienced at the hospital during that quarter, or submit the necessary corrections to the data to permit such certification.”

The certification can include the total of all Medicare approved units for the hospital or each unit can be certified individually.

When the hospital requires more than 14 working days to certify the data, a request for a two week extension should be made to the CHARS staff stating the reason more time is needed and what is being done to correct the situation. A second two week extension may also be requested stating the reason and what is being done to certify.

Monthly processing reports should be reviewed upon receipt to note any discrepancies between the hospital’s and the department’s discharges and charges. Adjustments and corrections should be made if necessary. These corrections should result in a quarterly report without worksheets and the certification should be easily accomplished.

The CHARS discharges and charges should be approximate to the information submitted to the department’s HPDS Hospital Financial database. CHARS collects discharges and the financial database has admissions.

The department has agreed that if the CEO is unable to sign the form, his/her designee should sign the CEO’s name with a notation of who is signing the report.

The original form should be returned to the department and a copy kept on file at the hospital. (See Appendix E-2 for a copy of the certification form.)

System Inputs

Hospitals, or their vendors, submit patient records to the department's contractor on 9 track magnetic tapes, IBM 3480 or 3490 cartridge, or by File Transfer Protocol (FTP).

General Input Information

The CHARS system was designed to accommodate the provider billing file and record formats for the National UB92 (CMS 1450 Version 4 flat file effective October 1, 1993 or Version 050 flat file effective 10-1-98) as documented in Addendum A and Addendum B from the National Uniform Billing Committee (NUBC). Record types 01-70, 80, and 90-99. Home Health (record types 71-74) and Pacemaker Registry (record type 81) are not supported and the system does not store every data element included in the UB92 CMS-1450 record set. (See Appendix C.) Revenue codes excluded from the CHARS system include outpatient services and professional fees. (See Appendix D.) The system accepts data submitted in the 192 character format. The record layout reflects the data elements collected by CHARS as indicated on each record. Except where noted, CHARS follows the *NUBC Revised Procedures* and the *Washington State UB92 Procedure Manual.*

Data elements that must be included in each submission and in the appropriate record type number (e.g., record 01):

1. **Value for Field Name Record Type:** required on each record.
2. **Submitted EIN:** Medicare Provider Number for the unit data are submitted for (record 01).
3. **Processing Date:** date the tape was created (record 01).
4. **Version Code:** value 004 for Version 4 and value 050 for Version 5 (record 01).
5. **Type of Batch:** A set of records from a single facility that are part of a single submission, value accepted is I for Inpatient (record 10).
6. **Medicare Provider Number:** CMS assigned number for the hospital or hospital unit (record 10).
7. **Patient Control Number:** unique number assigned by the hospital for each discharge, up to 20 characters are accepted (record 20).
8. **Patient's Last Name:** first two letters of patient's last name (record 20).
9. **Patient's First Name:** first two letters of patient's first name (record 20).
10. **Patient's Middle Initial:** used only if one letter in first name (record 20).
11. **Patient's Sex:** M or F, U-unknown is not accepted (record 20).
12. **Patient's Birth date:** format must be CCYYMMDD (record 20).

13. **Type of Admission:** value must be 1-4 (record 20).
14. **Source of Admission:** value must be 1-9; if type of admission is 4, newborn, use special source of admission codes and value must be 1-4 (record 20).
15. **Patient Zip Code:** five numbers plus four numbers if available. If a foreign county, first five letters of the country (record 20).
16. **Admission/Start of Care Date:** CCYYMMDD (record 20).
17. **Statement Covers Period From:** CCYYMMDD (record 20).
18. **Statement Covers Period Through:** CCYYMMDD (record 20).
19. **Patient Status:** values 01-08 or 20 (record 20).
20. **Source of Payment Code:** values 001-Medicare, 002-Medicaid, 004-HMO, 006-Commercial, 008-L&I, 009-Self Pay, 610-Health Care Service Contractors, 625-other sponsored patients, 630-Charity Care (record 30). For a secondary payer, two "30" records must be submitted (record 30).
21. **Type of Bill:** only values 111, 121, & 181 accepted (record 40).
22. **Sequence Number:** line item number (record 50).
23. **Accommodation Revenue Codes:** 10x-21x, a total of 4 line items can be included on one record, multiple records can be submitted (record 50).
24. **Accommodation Days:** number of days the patient was in this unit, total days in all units equal length of stay (record 50).
25. **Accommodation Total Charges:** submitted charge for each revenue code (record 50).
26. **Sequence Number:** line item number (record 60).
27. **Ancillary Revenue Codes:** total of 3 line items can be included on one record, multiple records can be submitted (record 60).
28. **Ancillary Units of Service:** CHARS requires units if required by Medicare. Other units, if not required by Medicare, may be submitted if desired (record 60).
29. **Ancillary Total Charges:** submitted charge for each revenue code, total charges of all Accommodation and Ancillary charges are listed on Ancillary record 60 as Revenue Code "001" (record 60).
30. **Principal Diagnosis Code:** ICD-9-CM code required, decimal not included (record 70).
31. **Other Diagnosis Codes**: ICD-9-CM code, decimal not included, eight codes may be submitted if applicable (record 70).
32. **Principal Procedure Code:** ICD-9-CM code, decimal not included, code required if applicable (record 70).

33. **Other Procedure Code:** ICD-9-CM code, decimal not included, four codes may be submitted if applicable (record 70).
34. **External Cause of Injury:** E-Code, one required for all 800-900 ICD-9-CM codes except 909.3 and 996-999.9 (record 70).
35. **Attending Physician Number:** Medicaid DSHS, DOH, or UPIN (record 80). DSHS numbers have seven digits and do not begin with a zero, DOH numbers have seven digits and begin with a zero, UPIN has one alpha and five digits.
36. **Operating (Other) Physician Number:** Medicaid DSHS, DOH, or UPIN (record 80).
37. **Total Accommodation Charges:** of all discharges on this submission (record 90).
38. **Total Ancillary Charges:** of all discharges on this submission (record 90).
39. **Number of Claims:** of all discharges on this submission (record 95).
40. **Submitter EIN:** same number as used on record 01 (record 99).
41. **Number of Batches on this File:** may include multiple hospital units, multiple months (record 99).
42. **Accommodations Total Charges for File:** (record 99).
43. **Ancillary Total Charges for File:** (record 99).

A combined total of 40 line items for Accommodation and Ancillary Revenue Codes are accepted in the CHARS system for each discharge record. If more line items are submitted, the first 40 line items are included and the additional line items are dropped. A worksheet is created because the Total Accommodation Charges and Total Ancillary Charges would not equal Total Charges. Hospitals will bundle like revenue codes (e.g., 30x Laboratory) into one revenue code and combine the units of service and total dollars for that revenue code. Total Charges of all Accommodation and Ancillary Charges should be the last line item listed on Ancillary record type number 60 as revenue code 001.

Input File Validation and Reformatting

Upon receipt, the data submission is logged into the contractor's control system so it can be tracked throughout processing. Once logged, the submission's format is verified with information provided on the Provider and Data Profiles. In addition, data submissions conforming to the National UB92 1450 Version 4 flat file or Version 050 flat file record format are further verified as follows:

1. The file begins with a record type 01 and ends with a record type 99;
2. The Submitter EIN fields on the record type 01 and the record type 99 are identical;

3. The Version Code field on the record type 01 contains “004” or “050”;
4. Each record type 10 on the file is followed by a record type 95 with the identical value in the field before another record type 10 occurs;
5. The hospital, or the hospital’s Medicare certified unit, can be identified by the Medicare Provider Number on record type 10;
6. Each record type 20 on the file is followed by a record type 90 with the identical value in the Patient Control Number field before another record type 20 or record type 95 occurs;
7. All record types between a record type 20 and a record type 90 contain the identical value in the Patient Control Number field that occurs on the record type 20.

If any of the validation requirements are not met, processing is halted until the discrepancy is resolved. Depending on the discrepancy, CHARS staff is notified of the issues so resolution can be addressed with the hospital.

When the hospital’s data submission fails the input validation or the audit process because either the file or the elements are not as specified, the department’s contractor can physically correct the input data under the direction of CHARS staff and with the hospital’s full knowledge and approval. This is done on an individual basis.

If all of the validation requirements are met, the submission is reformatted to a standard processing format for consistency and loaded into the system’s relational tables.

The department’s contractor assigns a unique identifier to each discharge. This is the HCIA Record Key on the worksheets.

Value Added Data Elements

In addition to the standard data elements input, processed, and stored, the system routinely calculates the following value-added data elements for each patient to aid in outcome measurement and analysis:

Age: the age of the patient is determined by subtracting the birth date from the admission or service from date.

Age Category: the age group the patient fell into when admitted. They are:

Newborn
<1
1-14
15-44
45-64
65-74
75+

DRG (Diagnosis Related Groups): the classification the patient falls into based upon their principal diagnosis, secondary diagnoses, surgical procedures, age, sex, discharge status, and the presence of comorbidities or complications (CCs). The contractor assigns this value using these criteria and the CMS DRG grouping software in effect at the time of the patient's discharge. DRGs are defined by CMS as groupings of patients who are similar clinically and in terms of their consumption of provider resources.

Provider Service Code: the standard service code assigned to the patient on the basis of principal procedure, principal diagnosis and patient age.

Medical
Surgical
Obstetric
Psychiatric
Pediatric
Newborn

Length of Stay: the length of time in days that the patient was in the facility. It is determined by subtracting the patient's admission date from the discharge date. If the result is zero, the length of stay is set to one day. Leave of absence days are excluded from the length of stay calculation.

MDC (Major Diagnostic Category): the CMS MDC group the patient falls into based upon the patient's principal diagnosis. This code is assigned based on the version of the CMS DRG software in effect at the time of the patient's discharge. MDC groups are defined by CMS as grouping of diagnoses corresponding to a single organ system or etiology and in general are associated with a particular medical specialty.

Operative Class: a Yes/No indicator of whether the patient required the resource of an operating room. CMS determines which DRG typically use these resources and if the patient has an operative procedure.

Payer Identification: the public and confidential data have:

001 = Medicare

002 = Medicaid (DSHS) (Healthy Options)

004 = Health Maintenance Organization (HMO)

006 = Commercial Insurance

008 = Worker's Compensation (includes state fund, self insured employers, and Labor and Industries crime victims claims)

009 = Self Pay

610 = Health Care Service Contractors

625 = Other Government Sponsored Patients

630 = Charity Care

The primary and secondary payers, as submitted, are stored in the database.

A Client Specific Payer Report (IDBS13) is produced for each hospital using the accepted CHARS payer numbers listed above. This report began July 1, 1997.

The Executive Summary Report, IDB503, converts the state-specific UB92 source of payment codes into the latest UHDDS (Uniform Hospital Discharge Data Set) principal payer types. These include:

Blue Cross & Blue Shield
Other Insurance Companies
Other Liability Insurance
Medicare
Medicaid
Workers Comp
Self-Insured
HMO-PPO
Tricare
Tricare VA
Other Government
Self Pay
Free
Other
Missing and Invalid

Total Episode Patient Charges: the total charges the patient incurred for this visit at the hospital. It is the sum of all the patient's ancillary charges and accommodation charges incurred. Outpatient and certain revenue codes are not accepted. (See exclusion list in Appendix D.)

Data Audits and Data Grading: Clinical vs. Financial: each audit is designated as clinical (clinical and demographic data elements) or financial (revenue codes, units, charges).

Fatal vs. Warning: all DOH audits are fatal and cause the record to be in error.

Record vs. Batch: all DOH audits are a record type.

Corporate vs. Specific: each audit is designated as corporate (performed on all records in all submissions, and used for data grading) or specific (performed under specific conditions based on DOH specifications)

After the auditing process each record is individually graded. This grade is used to determine what percentage of records are in error. The error percentage is calculated by dividing the total number of records that contain at least one error by the total number of records in the submission. If that percentage is greater than 60%, the data submission is flagged as exceeding the error threshold on the Data Quality Reports. The data submission may be returned to the hospital for resubmission after fixing the problem(s) or the worksheets returned for manual correction. The goal is for 5% or less error rate.

The Submission Transmittal form

The Submission Transmittal form includes the following information which should be completely filled out by the hospital or the hospital's vendor:

1. **Provider/Hospital ID:** can be either the hospital's license number or the hospital's Medicare provider number.
2. **Date:** the date the transmittal is sent to the department's contractor.
3. **Provider/Hospital Name:** the hospital name for this submission.
4. **Address:** the address for the hospital name for this submission.
5. **Vendor Name:** the name of the hospital's vendor doing this submission. If the hospital does not use a vendor, leave it blank.
6. **Address:** the address of the hospital's vendor doing this submission.
7. **Submitter Name:** the name of the person responsible for this submission either at the hospital or at the hospital's vendor. The person for the department and the department's contractor to contact if there are problems with the data submitted.
8. **Telephone Number:** of the person responsible for this submission.
9. **Time Period:** of the data submitted, starting MM/YY and ending MM/YY. If it is a partial month also include starting and ending day.
10. **Submission Type:** check new, replacement, or test.
11. **Submission Media:** check (1) if it is a 9 track tape, EBCDIC coding, block size, 1600 bpi or 6250 bpi, labeled or unlabeled, (2) if it is an IBM 3480 or 3490 cartridge, or (3) if it is an electronic file transfer (EFT).
12. **Record Format:** check UB92 CMS-1450 v4 or Version 050 flat file.
13. **Total files included:** list number of units submitted.
14. **Total number of discharges included:** if submitting more than one file, specify the number of discharges in each file, or specify number of discharges in the one file.
15. **Total charges included:** if submitting more than one file, specify the charges in each file, or specify the charges in the one file.
16. **Send to the department contractor's address:**

    Solucient, LLC.
    5400 Data Court
    Ann Arbor, MI 48108

(See Data Submission Transmittal form in Appendix E-3.)

Testing Data Submission

When a hospital changes the type of media submitted, software and/or hardware, DOH must be notified. DOH will notify the contractor and a test submission must be sent to ensure the data will be correctly submitted before routine processing resumes. This is generated by the same procedure that will generate production submissions. The submission should include only 50 to 250 records.

1. The hospital or hospital's vendor should resolve any format or media-related problems with CHARS staff or the department's contractor.
2. The department's contractor will work with CHARS staff and/or directly with the hospital/hospital vendor to resolve the problems.
3. If there are no outstanding problems, data submission can begin.
4. If there are outstanding problems, such as data, media, or format related problems, the hospital will arrange for correction of all problems and the test cycle will be repeated.
5. A test procedure must be completed before the first production submission following any significant changes in the hospital's or hospital's vendor's hardware or software environment.
6. The test cycle is repeated as many times as necessary until CHARS staff and the hospital are satisfied that all problems are resolved. Two test cycles are normally sufficient.
7. Acceptable test data can be used as production data if the hospital approves.
8. Testing should be completed in 60 business days.

Submission Procedure

Hospitals are required to submit data monthly to the department's contractor 45 days after discharge. This allows hospitals early notification of clinical and/or financial errors and gives adequate time for correction of the data.

A vendor who performs services for more than one hospital can submit patient records for more than one hospital and can include multiple units for a hospital on one media.

Data are submitted on magnetic media (9 track tapes, EBCDIC, 1600 or 6250 bpi , or IBM 3480 or 3490 cartridges) or via File Transfer Protocol (FTP) to the department's contractor. The department prefers a carrier such as Federal Express or UPS because missing data submission media can be traced. Regular mail may take over a week and there is no mechanism for tracing a lost data submission.

A Submission Transmittal form must be completed and accompany each submission. (See Appendix E-3.) In addition, magnetic media must have an external label with a minimum of the following:

Provider ID (hospital license number or Medicare provider number)
Vendor ID (if applicable)
Creation date
Transaction type (CMS-1450)
Blocking factor (if applicable, less than 32,000 bytes)
Recording Mode—ASCII or EBCDIC (if applicable)
Submission type (new, replacement, test)
Submission time period (start MM/YY to end MM/YY)
Sequence number (for multi-media files)
Number of discharges for each unit
Number of dollars for each unit

File Transfer Protocol (FTP): the department's contractor will provide dial-up accounts upon request from any hospital or hospital's vendor that wants to submit data electronically.

- It must meet the accepted record format (CMS UB92 Version 4 or Version 050)
- Data should be transferred in monthly batches.
- As with magnetic media, corrections are handled via 100% resubmission of the file or by the department's staff doing on-line record level corrections from worksheets
- Files must be compressed using PKZIP utility
- A separate file containing the transmittal form information must accompany each data file that is transmitted.
- The department's contractor should be notified when the electronic file transfer is sent, either by phone, E-mail, or fax.

Procedure for Submitting Electronic Submission Data by Modem:

Solucient File Transfer Protocol Instructions

Solucient accepts electronically transferred data via FTP. This method of electronic file transfer requires access to a web browser. These instructions provide you with system requirements, procedures for electronic transmission using Netscape Communicator and Microsoft Internet Explorer browsers, and solutions to the common problems that may be encountered when attempting the first file transfer. This method of electronic file transfer also currently meets the HIPAA and CMS security regulations for transfer of data over the Internet.

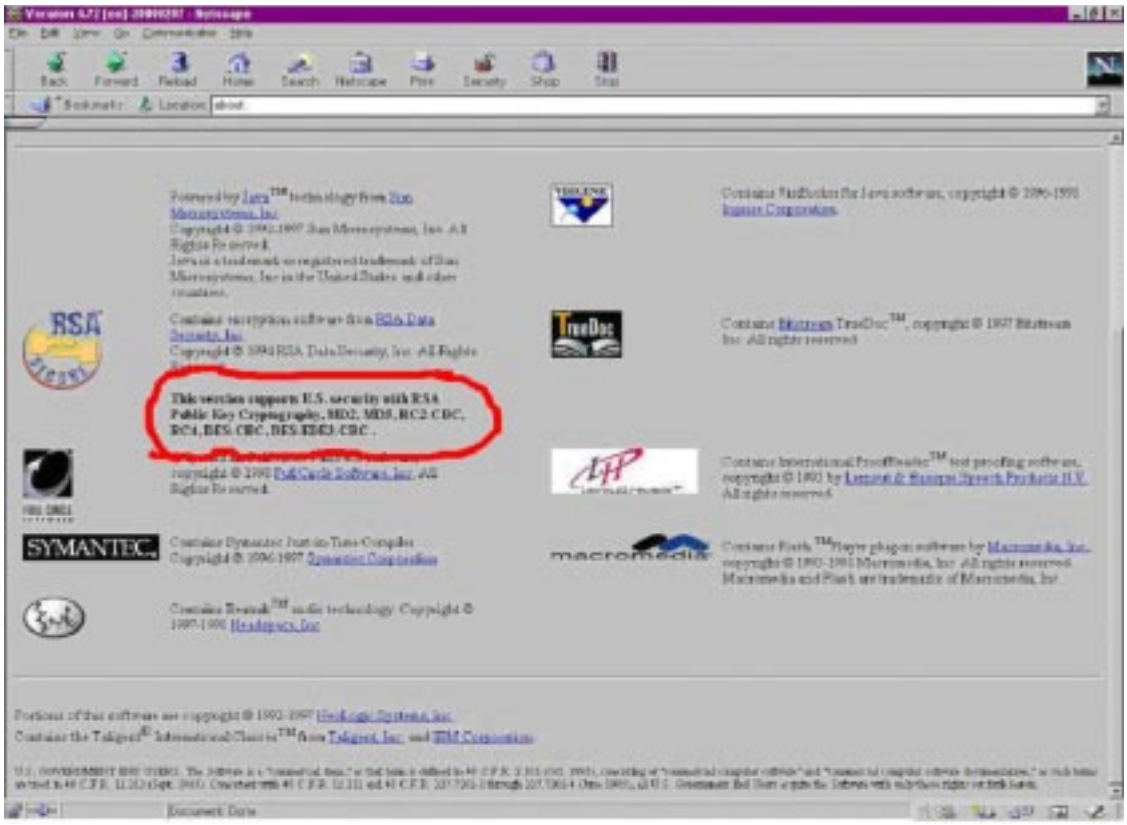
You must have an account set up with Solucient before electronic file transfer can take place. Please contact your Client Support Specialist at 800-568-3282 to set up an account name and password.

System Requirements:

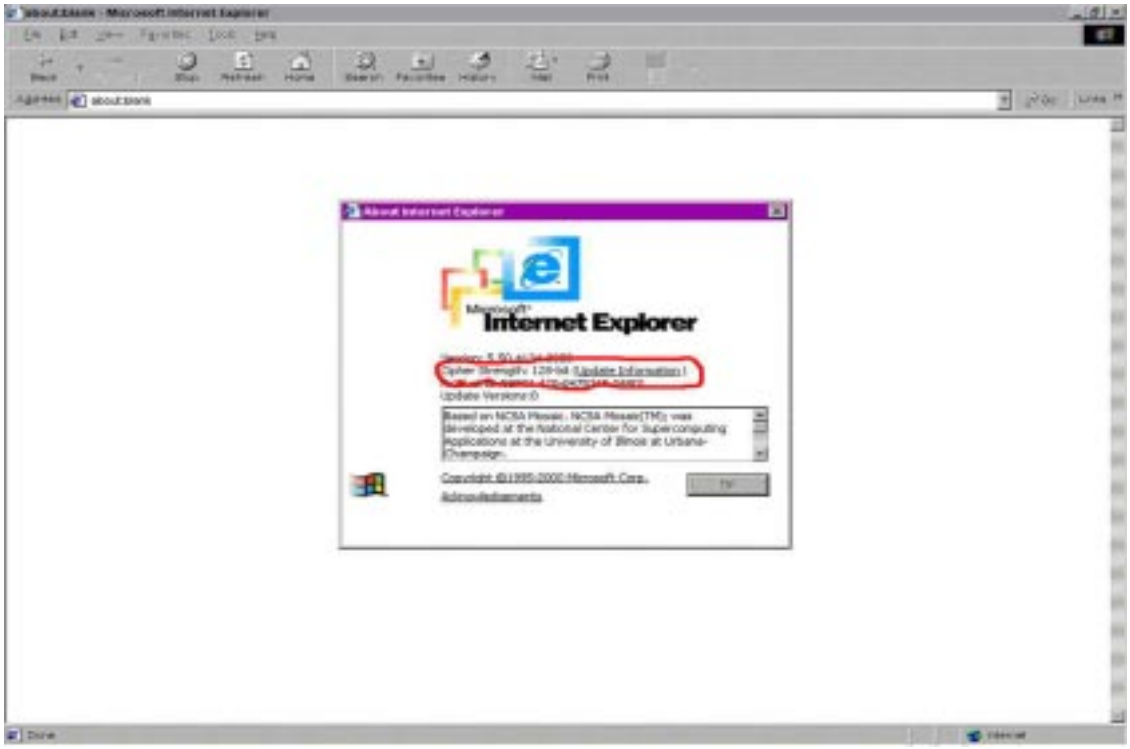
1) Internet access or dial-up access to Solucient with the ability to use a browser on the HTTPS port, port 443. This is a standard port, typically allowed through any firewall or proxy.

2) A browser with **128-bit encryption**. HIPAA and CMS standards require encryption with a minimum of 128 bit keys. The screenshots below show what to look for in order to verify the level of encryption when using either Netscape Communicator (version 4.72) or MS Internet Explorer (version 5.5). Both of these browser versions have 128-bit encryption. Any version below either of these will not be compliant with this system requirement.

    a) Netscape: Select **About Communicator** from the Help menu. Look for the entry that has been circled below. The key phrase, “U.S. security,” indicates that it is the 128-bit version. If it states “International security,” you have a 40 or 56-bit encryption level. NOTE: If you don’t have the 128-bit version, you can get it from the Netscape web site, http://www.netscape.com/. Please contact your local support staff for assistance with installing this product.



b) Internet Explorer: select **About Internet Explorer** from the Help menu. Look for the entry that has been circled below. The key phrase “Cipher Strength: 128-bit,” indicates that it is the 128 bit version. If it states “Cipher Strength: 40-bit” then you have the 40 bit encryption level. NOTE: If you don’t have the 128 bit version, you can get it from the Microsoft web site, http://www.microsoft.com/. Please contact your local support staff for assistance with installing this product.



3) You must be able to access the file directly from the machine you will use to transfer it. What this means is that you may need to move the file from a mainframe or a UNIX box if you don't have some way to see the files directly, such as PC-NFS or Samba.

If you have fulfilled these three system requirements, you are ready to proceed with the file transfer steps.

File Transfer Procedure:

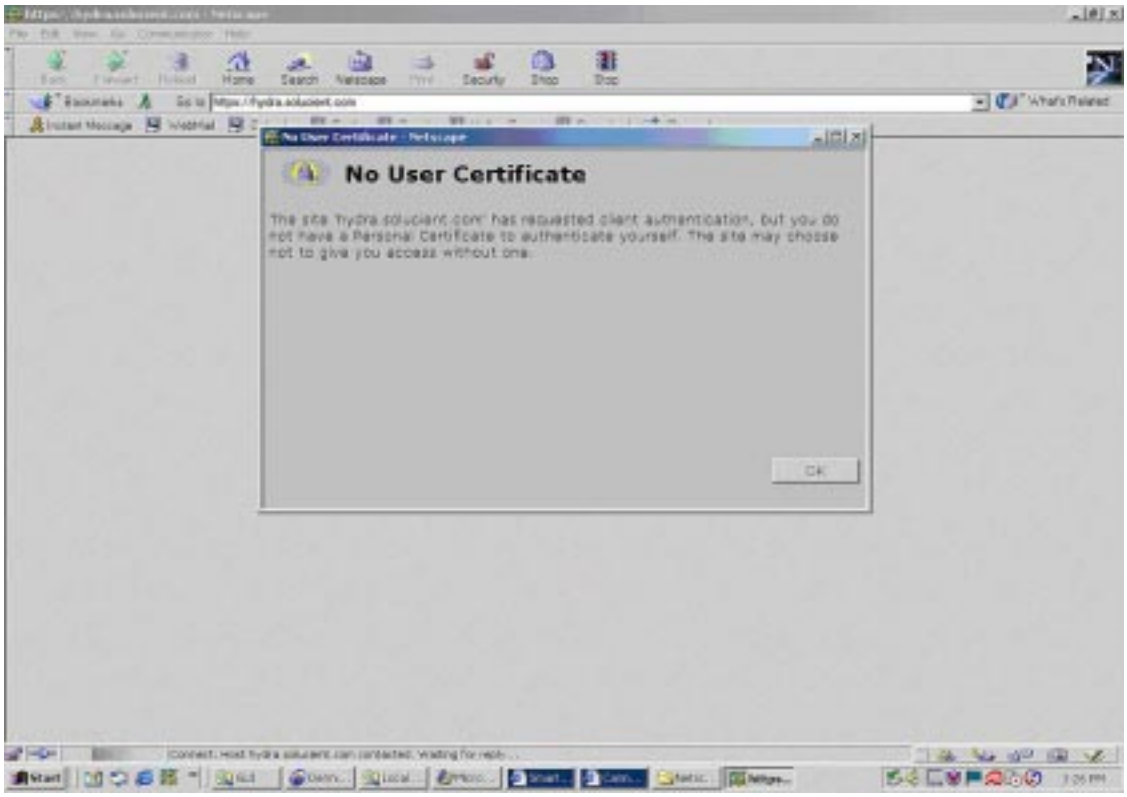
Step 1 If necessary, dial your ISP, or do what is required to activate your Internet connection. If you are using a corporate T1 or similar connection, you may skip this step.

Step 2 Open your browser. Solucient provides documentation for Netscape version 4.x and Microsoft Internet Explorer version 5.5. Other versions of these are very similar with only minor differences in wording.

Step 3 Enter the URL https://hydra.solucient.com/.

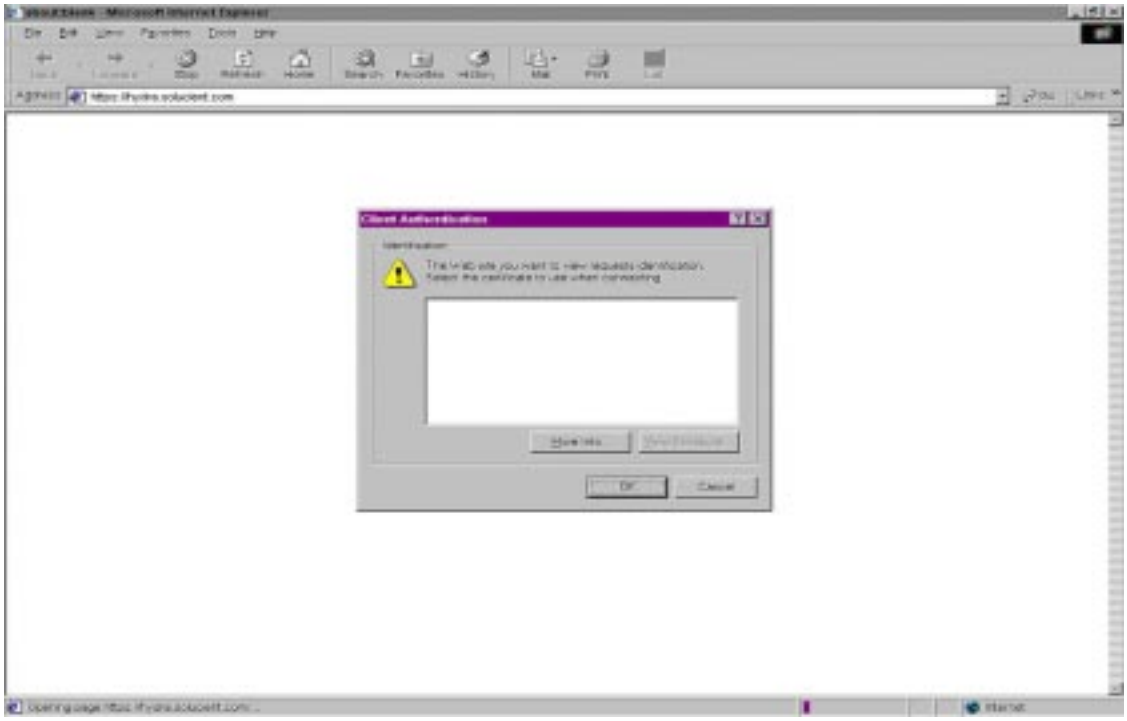
Step 4 Bypass the prompt for a personal certificate for both Netscape and Microsoft. Depending on your browser, you will encounter one of the following screens:

a) For Netscape with no personal certificate, click the **OK** button:



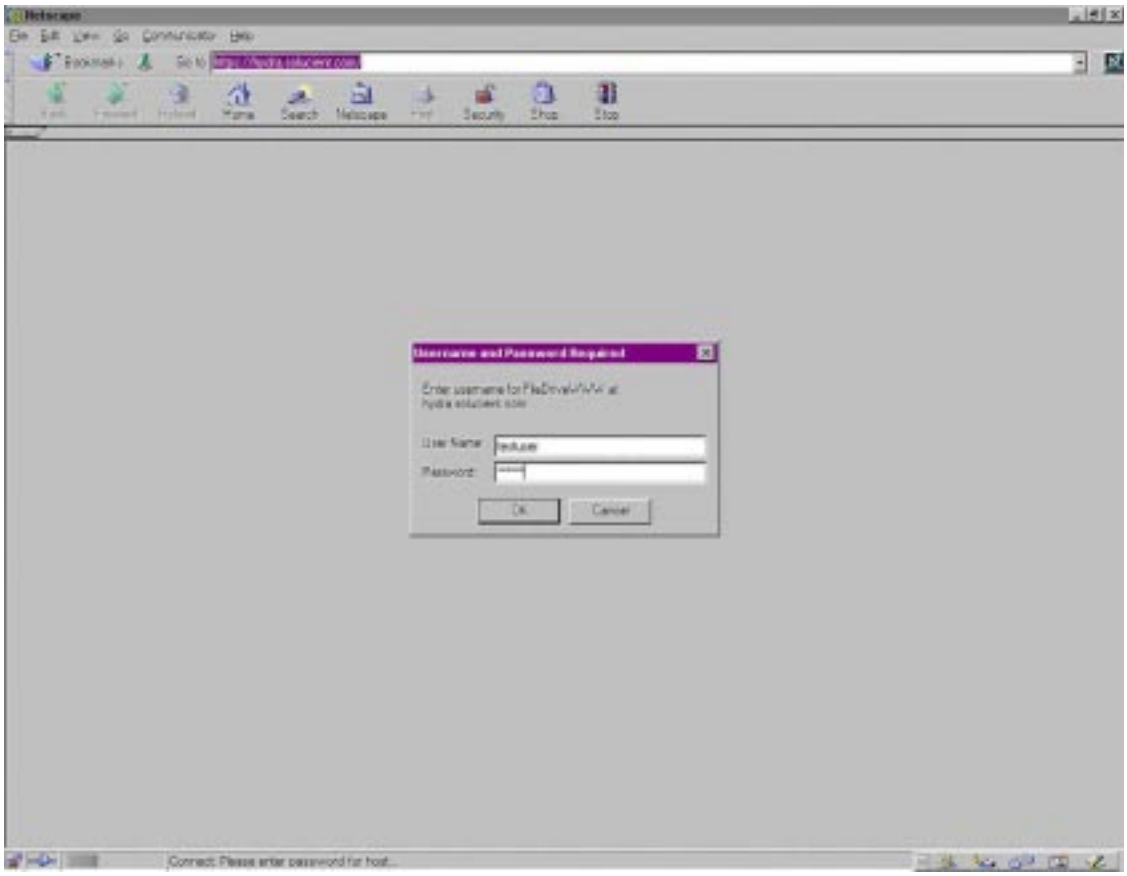
b) For Netscape with a personal certificate, click the **Cancel** button:

c) For Microsoft Internet Explorer with or without a personal certificate, click the **Cancel** button:

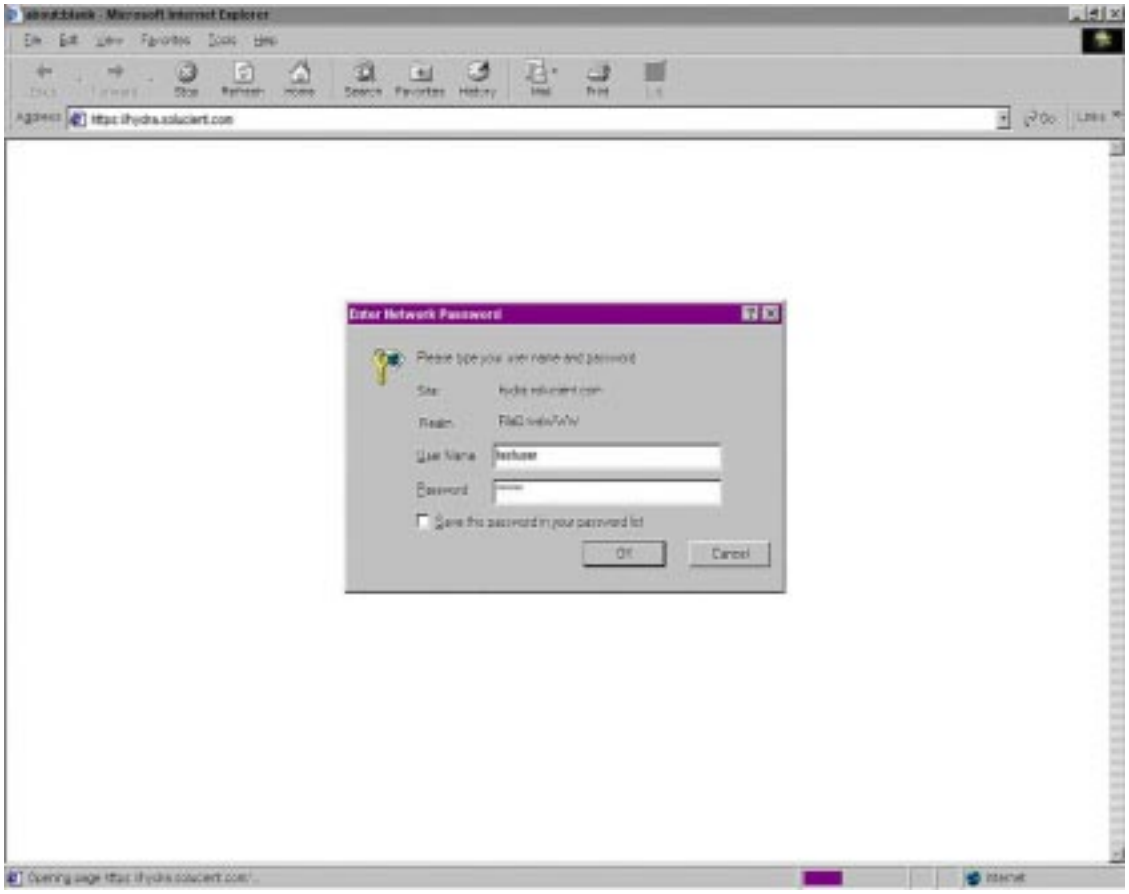


Step 5 Enter the account name (user name) and password provided by Solucient. You will encounter the following screens:

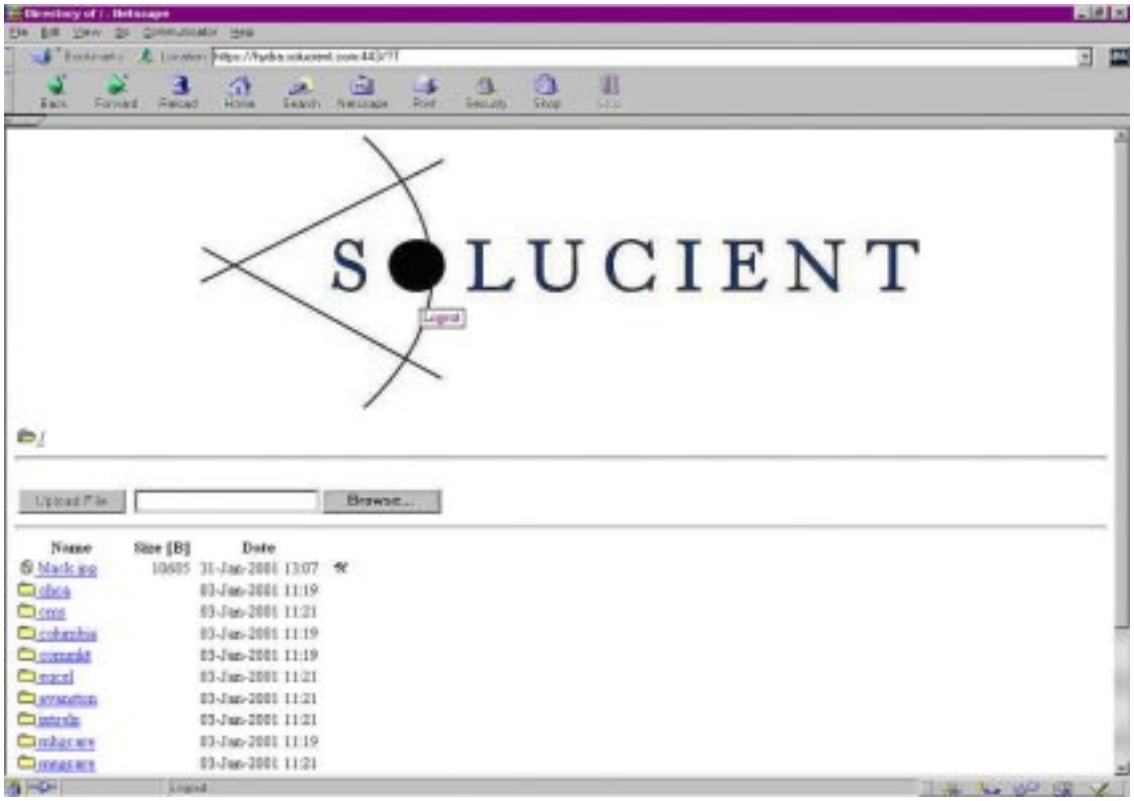
a) When using Netscape, enter your user name and password and click the **OK** button:



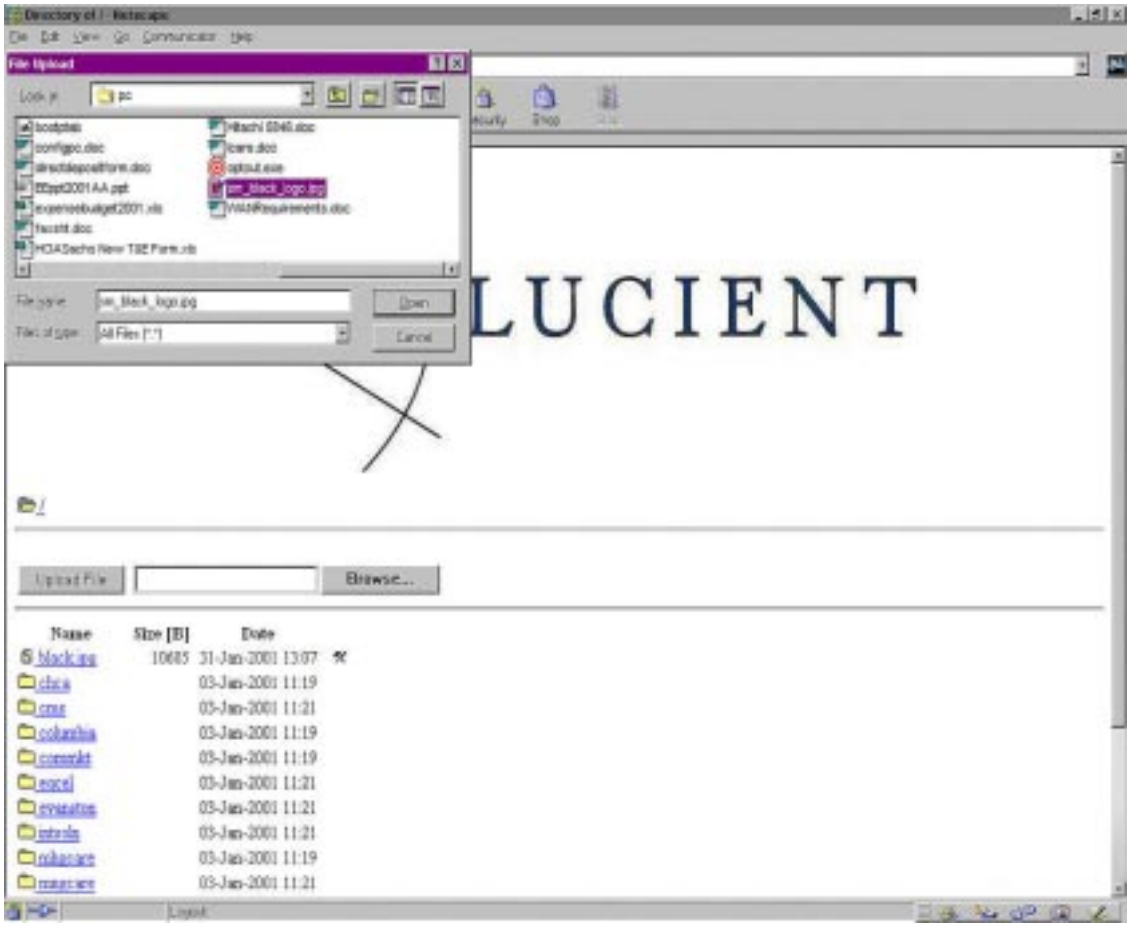
b) When using Microsoft Internet Explorer, enter your user name and password and click the **OK** button:


Enter Network Password
Please type your user name and password
Site:
Realm:
User Name:
Password:
Save this password in your password list
OK
Cancel

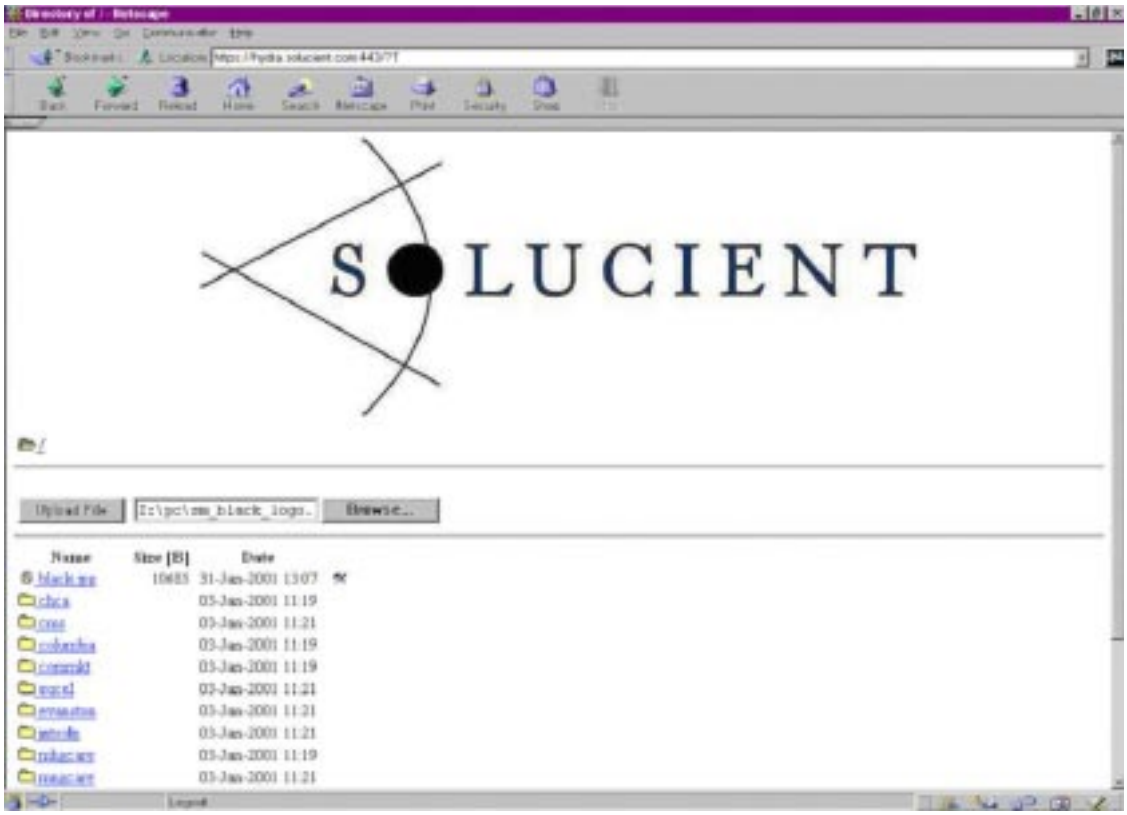
Step 6 Your home directory web page will appear after entering your account name and password. Click the **Browse** button to locate the file you wish to upload.



Step 7 The File Upload dialog box will appear. Select a file by highlighting it and then click on the **Open** button:


LUCIENT
Browse...
Name
Size [B]
Date

Step 8 To complete the file upload process, click on the **Upload File** button:

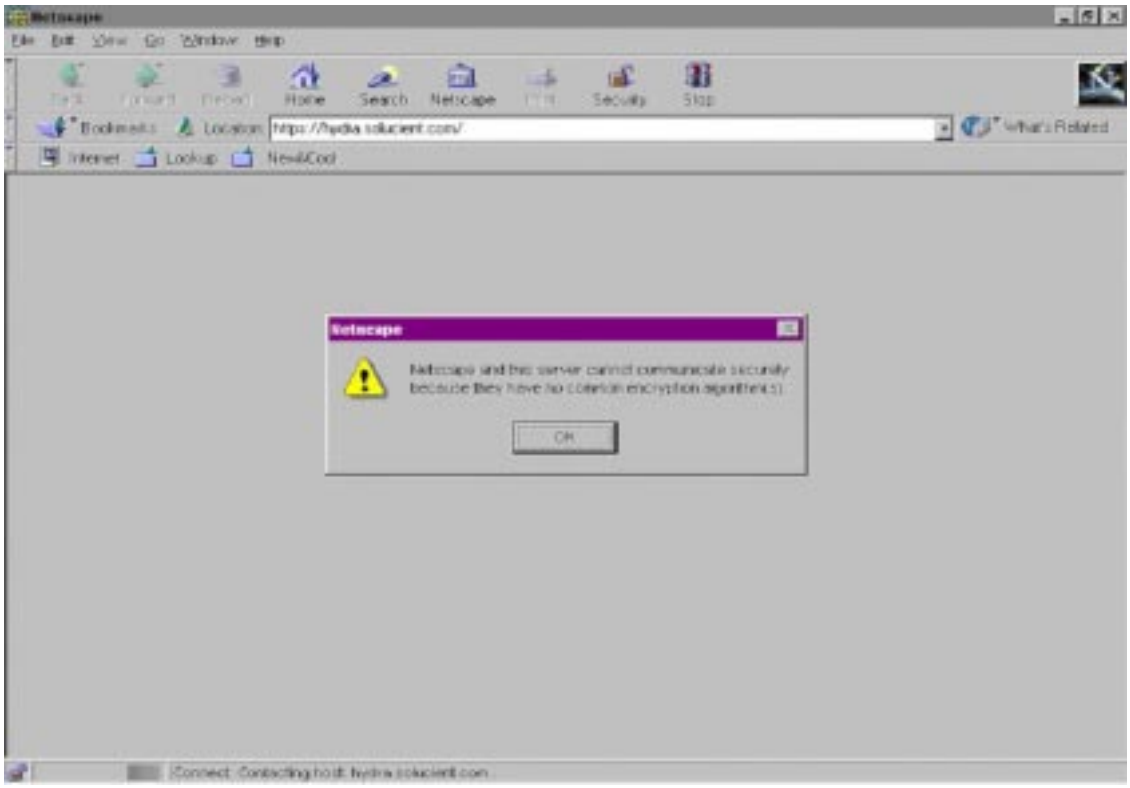


You have now successfully transferred your file to Solucient.

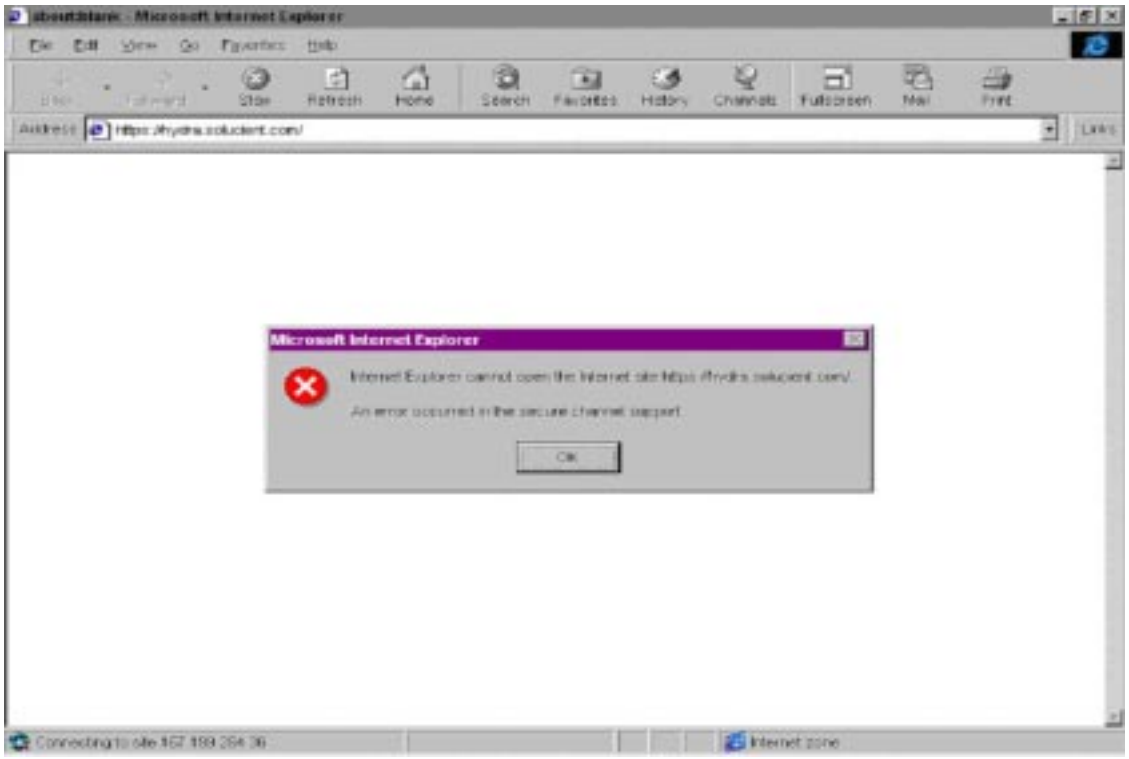
Solutions to Common Problems:

1) Insufficient browser security level. If you see either of the following errors, you do not have the version of your browser that allows 128-bit encryption (refer to item # 2 under System Requirements).

a) When using Netscape, the following error message will be encountered:



a) When using Microsoft Internet Explorer, the following error message will be encountered:


Microsoft Internet Explorer
OK

2) Clicking the **UPLOAD FILE** button before selecting a file (the error message is the same for both Netscape and Microsoft). Refer to steps 6–8 to properly select and upload a file for transfer.

NOTE: Please follow the required naming convention for files. The files should be transferred by using the following format:

nnnn = the Solucient assigned hospital number (hosp id)

mmyy = month and year of discharge data time period

ext = extension of file (i.e. txt, dat)

Example: 12340199.dat

Please contact your Client Support Staff at 800.568.3282 with any questions or concerns.

Processing Periods

Data are loaded and processed when received by the contractor. Reports and worksheets are created and sent to CHARS staff for review and distribution. Once each quarter a reaudit is performed on all records. Reports, which specifically include the

number of discharges and dollars for the quarter, are created along with worksheets for any uncorrected elements that remain. These reports are reviewed by CHARS staff and distributed to the hospitals along with certification forms. Half year and full year data files are created for public and confidential release. Standard Reports are also created for public release. (See Appendix F for the processing schedule.)

Production Cycle

1. After completion of the test cycle, regular production submission is done monthly. Data is required to be submitted to the department's contractor 45 days after discharge (December data is due February 15).
2. Each submission must be accompanied by the Submission Transmittal form. The hospital or the hospital's vendor are required to fill out the form completely.
3. The department's contractor oversees processing of the submission. When there are problems, and an over 60% error rate, CHARS staff is contacted for a decision, and the contractor will write to the hospital stating the scope of the problem. Options for the hospital include correcting the problem and resubmitting the data, or worksheets can be sent to the hospital for manual correction. If it is one consistent problem (e.g., Medicare provider number has a dash), CHARS staff can, after discussing it with the hospital, ask the department's contractor to correct the data problem for this submission and accept the submission. If it is less than a 60% error rate, worksheets are created by the contractor and sent to CHARS staff who returns the worksheets to the hospital for correction. The target error rate is less than 5%.
4. When the hospital has submitted duplicate records, either within the current batch or in a previous batch, the system keeps the first record and drops the second. A list of the duplicate records dropped is returned to the hospital with the reports and worksheets.
5. If the hospital, or hospital's vendor, requires help to solve a problem, the department's contractor will work with the hospital, the hospital's vendor, and the department until the problem is solved.
6. Once a submission is accepted for processing, the system assigns each record a unique internal control number (ICN) (Solucient Record Key).
7. After each correction cycle, whether through the on-line correction system or total batch resubmissions, the reports are regenerated and sent to the department to review. The department sends the reports and worksheets to the hospital. The rejected submission is returned along with a submission rejection report. The report lists both the data in error and a rejection message.

8. The hospitals have 14 days to correct worksheets and return them to the department. An on-line report is produced showing the number of incomplete records for each hospital and how much time has lapsed (30 days, 60 days, 90 days) since the hospital data were processed and worksheets sent out.
9. Data Audits and Data Quality Reports are performed on every data submission. The reports are expected at the department five working days after receipt of the data by the contractor. The department reviews the reports, keeps a report showing the number of discharges, total dollars, number of errors, type of errors, and the date reports and worksheets were mailed to the hospital. This is filed in the department for reference.
10. CHARS staff may request a report of each record more than 30 days old by hospital, hospital number, PCN, admit and discharge date, edit number, number of edits per record from January through the last submittal, and at end of year.
11. The department's contractor creates a reaudit quarterly report which includes total discharges and total dollars for the period, and creates worksheets for any corrections that were not done monthly or which were corrected erroneously. The hospitals have 14 days to correct the worksheets and return them to the department. CHARS staff does the corrections on-line. The hospital can request another reaudit report, especially if census discharges and dollars are in error. The hospital can also request a monthly detailed charge reconciliation report which includes the PCN, birth date, age, sex, admit date, discharge date, total dollars and DRG assignment.
12. The hospitals certify quarterly that the discharges and dollars for the period are 95% correct. A hospital can request two two-week extensions to certify. This is submitted in writing to the department and states why the hospital cannot certify and what they intend to do to correct the problem.

CHARS Audits (Edits)

The audits performed include the Medicare Code Edits (MCE) and the department's approved audits. This includes clinical and financial audits. The audit list is in Appendix G.

Audits

The system produces a turnaround document (worksheet) for all records failing the audits, and several processing reports for the hospital and for the department. These documents inform each hospital of the disposition of each submitted patient record. The various auditing functions are:

Presence: All required data elements must be included in the hospital submittals. The system determines if these elements are present; if not, the record is rejected or a worksheet produced.

Format: The format edits evaluate input data elements for specific formats, such as alphabetic, numeric, or alphanumeric, as well as for proper justification.

Validity: The validity edits confirm that the data elements are in a set of pre-defined values, such as the diagnosis code being a legitimate ICD-9-CM code.

Consistency: The consistency audits test the data element's logical consistency with one or more other data elements within the same record. This type of audit includes appraisal of the linkage between such items as sex and diagnosis.

Reasonableness: The reasonableness edits evaluate data elements to ensure they fall with a range of reasonable values.

Lists of Audits: This includes the Medicare Code Edits and the department specific edits. These edits are subject to change as needed. (See Appendix G.)

Correction Function

The CHARS system provides a correction function. These functions are designed to allow for corrective action for any required data element on any given patient record. The correction function also encompasses deletion, adjustment, and addition of records.

Worksheets—Contractor

The system generates hard copy worksheets for those discharge records with errors. The system uses the Medicare Code Edits (MCE) and also the department's specific edits. The elements are verified against master tables. The MCE are updated when CMS annually releases the new grouper for discharges after September 30. The physician tables are updated at different times; specifically, the UPIN table is updated quarterly by the contractor, the DSHS tape is sent to the contractor monthly, and the department's license numbers are updated every two months. Other tables are updated as changes occur; for example, changes in hospital Medicare Provider Numbers and hospital name changes. Validation of the entered correction is done immediately or overnight, depending on the audit. Reaudits can be requested any time and are routinely done quarterly, and this produces worksheets for all incorrect data existing at that time.

Worksheets—CHARS staff

When the system detects an error, a turnaround document (worksheet) is produced for review. CHARS sends the worksheets to the hospitals for correction. The hospital corrects the worksheets within 14 working days and returns them to CHARS. The worksheets, with changes marked in **red**, are corrected in the system. Each record can be retrieved using the Solucient Record Key, patient control number (PCN), or discharge date. The necessary changes are entered and checked for validity. Most edits are validated as entered and some are validated overnight.

Deletion of a Record

The system provides the capability for CHARS staff to delete records. A deletion is the canceling of a previously submitted record. To effect such a reversal, the adjustment/deletion form is completed by the hospital and the CHARS staff extracts the record from the database and deletes it from the system. The form contains the hospital name and number, PCN, and the admit and discharge dates of service. These elements are used to locate and positively identify the record to be deleted. (See Appendix E-1 for the Adjustment record form.) The records can be submitted on a readable computer printout, double spaced, with no more than 20 records to a page.

Adjustment of a Record

An adjustment is a change to any of the accepted data elements. It results when the hospital needs to change previously accepted data (e.g., charges, diagnoses). It must identify the record and identify the correction to be made. A list of the discharges including PCN, admit date and discharge date are submitted to the CHARS staff on an adjustment form (see Appendix E-1) or on a readable computer printout, double spaced, with no more than 20 records to a page.

Addition of a Record

An addition of a record requires the hospital to send the UB92 form with all the pertinent information to CHARS. The CHARS staff manually keys the information into the system. Audits are performed and if the data do not pass the audit a worksheet is produced during the reaudit procedure.

System Outputs

Hospital and Physician Provider Reports

The CHARS staff has on-line access to all the hospital units and physician tables including the Medicare UPIN, Medicaid DSHS, and the department's license numbers.

Hospital Data Quality Reports

The system produces hospital level Data Quality Reports for each data submission. The reports offer feedback to the hospital, the department, and the contractor's staff about the quality and quantity of the data submitted. (See Appendix H.)

If a data submission passes the specified threshold (60%), the Record Exclusion Report (if applicable) and Data Quality Reports IDBS01-IDBS05 and IDBS07-IDBS12 will be sent to the hospital for verification and correction.

If a data submission does NOT pass the specified threshold, the Record Exclusion Report (if applicable) and Data Quality Reports IDBS001-IDBS05, and IDBS12 will be sent to the hospital for verification and correction. This can be accomplished by manual correction or resubmittal of the entire submission for the designated time frame.

1. **Record Exclusion Report** (IDBS00)

   This lists the patient control number, discharge date and bill type for all records that could not be processed for a submission. The reasons for these exclusions include invalid or missing bill types and duplicate patients.

2. **Data Quality Cover Sheet/Report Card**

   This is completed by the Support specialist after the Data Quality Reports have been reviewed. The Report Card is marked either Pass or Fail based on whether the Fatal Error Threshold has been exceeded. If the error rate is below the threshold, the data is considered to have passed. This report is kept at the department documenting what was previewed and when the department mailed the worksheets and reports.

3. **Data Submission Summary Report** (IDBS01)

   This report contains information for each hospital and hospital unit and processing period in a submission: total discharges, total charges, date the data were processed, the targeted error threshold (60%), total discharges with fatal errors, and the percentage of clinical and financial errors. The report also contains the total discharges on each of the data quality reports and the internal report name used to verify output prior to shipment.

4. **Summary Audit Error Report** (IDBS02)

   For each hospital and hospital unit and processing period in a submission, this report displays total discharges by month within the submission. It also reports the percentages and totals for clinical and financial fatal errors, and total excluded records. It serves as an indicator of the quality of the data processed.

5. **Executive Summary Report** (IDBS03)

   This report displays total discharges and percentages for key summary, demographic, financial, and clinical data. Totals and percentages are provided for each of the four areas. The summary area displays: total discharges and days, total except well newborn, and total combined well newborn and obstetric patients. The demographic area includes zip codes and sex. The financial area includes total charge threshold and primary payer. The clinical area includes: admission type, length of stay greater than 60 days, missing principal diagnosis and procedure, missing secondary diagnoses and procedures, ungroupable records, and severity index by RDRG.

6. **Clinical Data Quality and Historical Comparison Report** (IDBS04)

   This report contains total discharges and percentage of discharges for key clinical fields and is produced for each hospital and hospital unit and processing period in a submission. These fields include: zip code, length of stay (LOS), age in years, admission source, admission type, sex, patient status, attending physician, principal diagnosis, additional diagnoses, principal procedure, and additional procedures. For each data field a count and percentage of discharges are provided, and for selected data fields the count and percentage of missing and invalid entries are included. Historical comparisons are not included at this time.

7. **Financial Data Quality and Historical Comparison Report** (IDBS05)

   The report contains total discharges and percentage of discharges for key financial fields and is produced for each provider and processing period in a submission. These fields include: Total charges, primary payers, standard service groups, revenue codes, and severity index by RDRG. The report includes counts of valid entries for each field and the percentage of missing entries for charges, payers and revenue codes. Charge information is also provided and displays both zero charges and charges above and below reasonable thresholds.

8. **Classification by DRG Report** (IDBS07)

   This report displays total discharges and percent of discharges for each DRG represented. The following length of stay information is provided: total length of stay in days, percentage of total days for the period, average length of stay, and the percentage of discharges in each of six age groupings. This report excludes discharges with incalculable ages.

9. **35 Most Frequent DRG Report** (IDBS08)

   This report displays for each hospital, in descending order, detailed data about their top 35 DRGs. For each DRG the report includes: DRG code and title, total discharges, percentage of total discharges for the period, total length of stay days, percentage of total days for the period, and average length of stay.

10. **35 Most Frequent Principal Diagnosis Codes** (IDBS09)

    This report displays for each provider, in descending order, detailed data about their top 35 principal diagnosis codes. For each diagnosis the report includes: diagnosis code and title, total discharges, percentage of total discharges for the period, total length of stay days, percentage of total days for the period, average length of stay, average charge, and minimum and maximum charge.

11. **35 Most Frequent Principal Procedure Codes** (IDBS10)

    This report displays for each provider, in descending order, detailed data about their top 35 principal procedure codes. For each procedure the report includes: procedure code and title, total discharges, percentage of total discharges for the period, total length of stay days, percentage of total days for the period, average length of stay, average charge, and minimum and maximum charge.

12. **Audit Error Turnaround Document** (IDBS11)

    This document is produced for each hospital and processing period in a submission that is below the program's defined fatal error threshold (60%). This document is produced for each record that is in error. The information provided on the document includes key information that identifies the record, the data element values in question, the error message itself, and additional information that may be helpful in reviewing the error.

13. **Audit Error Summary Report** (IDBS12)

    For each hospital or hospital unit within a submission, this report displays the following information: audit ID number, error type, error message text, discharge month, the number of times the error occurred, and the total number of times the specific error occurred for all months in the submission. This report is created each time a submission is received.

14. **Reaudit Data Quality Report—Quarterly Certification Report**

    A reaudit report of all data submitted for the quarter. It includes the number of discharges and dollars submitted to CHARS for the quarter. It includes the above reports created for a monthly submission. This is sent to the hospitals with a certification form so the hospital can certify that the data submitted is 95% correct.

Management On-Line Reports (See Appendix I)

These reports are available to hospitals upon request.

1. **Hospital Data On File by Discharge Month**

   This report is used to review data submissions by month. Pending data are data awaiting review or corrections. It can be printed in the CHARS office.

2. **Hospital Submissions by Date Received**
   This report is used to review data received by submission number and date received (processed). This report lists the assigned submission number, the date it was processed, the discharge month, processing status, patient count on the submission, and associated hospital charges per submission. It can be printed in the CHARS office.

3. **Pending Hospital Data Error Counts**

   This report is used to review error statistics on data submissions that are not corrected. This report lists the pending discharge month by records with errors, total number of errors, and records with no errors. It can be printed in the CHARS office.

4. **Pending Hospital Error Aging Report**

   This report is used to review a single data submission by discharge month, either aged or still outstanding, displayed in 30 day increments. This report lists the pending data submission(s) by discharge month aged into 30 day increments listing total records with errors and total error counts. It can be printed in the CHARS office.

5. **Submission Summary Information Report**

   This report is used to review a single data submission by hospital. This report lists by hospital submission summary information including: discharge month, respective patient count and corresponding hospital charges. It can be printed in the CHARS office.

6. **Summary by Hospital (and Hospital Units) by Month**

   This report is used to review all hospital data submissions by month. This report lists the hospital name followed by discharges by month. It provides a list of patient counts by month for active data in the corrections database. It can be printed in the CHARS office.

Ad Hoc Reports (See Appendix J)

These reports are available to hospitals upon request.

1. **Error Rate Calculation Report (ERCR)**

   This report lists all uncorrected errors in the system by hospital and hospital unit. At present the report includes all data that do not pass an audit. **The department will use a "flag" to indicate that the error was approved by the hospital as acceptable and does not need correcting. These acceptable audit errors would not be included on the report.** At the time of release of first half year (January) and full year data (July), this report is generated and includes all errors in the released data. The final report is produced by the contractor and provided by the department to purchasers of the data, when requested.

2. **Charge Reconciliation Report**

   This report includes the hospital's license number, patient control number, birth date, age, sex, admit date, discharge date, total dollars, and DRG assignment. It is requested by the hospital or from CHARS staff for a specific month. CHARS staff contacts the contractor and the report is sent via FTP to the department. CHARS staff prints it on paper or produces a 3.5 inch diskette and sends it to the hospital.

Standard Reports

Standard Reports are released for the first six months data and for full year data.

Before the release of full year data, the contractor calculates and applies the Washington state specific weights, case mix indices, statistical outliers, and RDRG. Half year data contains the weights, indices, outliers and RDRG applied to the previous year. These are included on the Standard Reports and on the confidential and public data sets.

The reports are produced by the contractor and currently printed at the department. They are ordered from the department and can be produced on paper, CD ROM, and 3.5" diskette in an Excel spreadsheet format. Charges vary with the size of the report. For 1987-1994 there were 13 Standard Reports. For 1994-1995 there are five reports, some are combined previous reports and some reports are no longer produced.

The standard reports listed below are available on the Department of Health Website at: http://www.doh.wa.gov/ehsphl/hospdatamenu.htm.

1. **Standard Report 1 and 2: Hospital Census and Charge Comparison**

   An alphabetical listing by hospital and hospital unit that includes hospital name, hospital ID, discharges, patient days, mean length of stay, total charges, mean charges per discharge, mean charges per day, case-mix adjusted charges per discharge index, and case-mix adjusted charges per discharge mean.

2. **Standard Report 3 & 4: Hospital Payer Census and Charge Comparison**

   An alphabetical listing by hospital and hospital unit that includes hospital name, payer name, payer number, discharges, patient days, mean length of stay, total charges, mean charges per discharge, mean charges per day, case mix adjusted charges per discharge index, and case mix adjusted charges per discharge.

3. **Standard Report 5 & 6: Hospital Census and Charge Comparison by DRG**

   A numerical listing by MDC, DRG, DRG definition, hospital name, hospital ID, discharges, patient days, total charges, mean length of stay, mean charges per discharge, and mean charges per day.

4. **Standard Report 12: Patient Origin, Both Census & Charges**

   An alphabetical listing by hospital name, hospital ID, patient origin based on zip code, city corresponding to the zip code, total discharges, percent discharges within zip code, percent discharges within the hospital, total charges, percent charges within the zip code, percent charges with the hospital.

See Appendix K for the packet including the (1) announcement letter, (2) order forms, (3) CHARS Public Data File Layout, (4) Report Field Definitions, and (5) sample reports. Order forms are sent to Hospital Administrators, CHARS Hospital Representatives, CHARS data users, and Hospital and Patient Data Systems (HPDS) general mailing list.

Annual and Semi Annual Data Release

Public Data Set

The public data set is produced for the first six months and for the full year. It contains approximately 575,000 discharges annually and requires approximately 600 megabytes of hard drive space. It is ordered from the department and is available on:

> Compact Disc (**CD ROM**) in ASCII, Dbase, SAS, and Access. It can be custom blocked in EBCDIC. The record size equals a fixed block, 1030 characters. Each CD record is ended by a new line character that adds one character to the block.

The data and media are guaranteed for 30 days after purchase. Any defective media or data found within this period will be replaced free of charge. After 30 days an additional processing fee may be charged for replacement.

The public data do not include the patient control number, nine digit zip code, birth date, admission date, discharge day (includes month and year). It does include patient age and length of stay.

Confidential Data Sets

This data set includes the information in the public data set plus a department assigned sequence number, patient control number, nine digit zip code when available, birth date, admit date and discharge day. This data are available for internal department use or approved research purposes. To obtain this set for research the request must be made before the DOH/DSHS Human Research Review Board. When approved the data are obtained from the department. A contract is written, signed and maintained in the department.

Special Reports and Custom Requests

Special requests and customized data from confidential and public data sets are available from the CHARS Manager.

Relational Database Tables

The system tracks discharge records by hospital number, hospital patient control number, system generated internal control number, medical record number (if submitted by the hospital), and discharge date.

Provider Tables

The **hospital** provider table contains all current Medicare assigned provider numbers for hospitals and Medicare certified hospital units, and the DOH license numbers. Corrections, changes, and additions are provided by the hospitals and CHARS, and updated by the contractor.

The system provides on-line access and reports of hospitals and hospital units. This list accompanies each data set purchased from the department. The list is available at the CHARS office.

The **physician** provider table contains (1) all Medicaid numbers assigned by the WA Department of Social and Health Services (DSHS) for physicians and other professionals that admit patients to a hospital, (2) the DOH license file for physicians (MD), osteopaths (DO), dentists (DDS), podiatrists (PO), and midwives (MW), and (3) CMS assigned Unique Physician Identification Numbers (UPIN).

The DSHS physician file is available for purchase from CHARS after a Public Access Affidavit is signed by the purchaser. The contractor provides this file for CHARS on tape or IBM 3480 cartridge. The DOH physician file may be purchased from the DOH licensing division if they approve the purchase. The UPIN file is purchased from the US Government Printing Office. Individual UPINs are accessible on the Internet using www.cpg.mcw.edu/www/upin.html.

Reference Tables

The reference tables provide the system with additional data information to test various relationships and field validations. This includes:

- Revenue Code table
- CMS Grouper table
  -Diagnosis Codes
  -Procedure Codes
  -DRG Categories
  -MDC Categories
  -MCE edits
- RDRG table
- Payer Code table
- Zip Code table
- DOH Edit table

Revenue Codes Table

The Revenue Code Table contains valid revenue codes per the National UB92 Procedure Manual and the Washington State UB92 Procedure Manual. Exclusions from the CHARS system are ancillary revenue codes for selected outpatient services and professional fees.

CMS Grouper Table

This table includes all current ICD-9-CM diagnoses and procedure codes, E-Codes, and MDC and DRG categories. It also includes the Medicare Code Edits. There are two groupers used each year because CMS changes occur October 1 each year.

Refined DRG (RDRG) Table

This is the refined severity system derived from the CMS approved 3M Yale University grouper. This severity system assignment is made annually before the release of full year data. First half data release contains the previous year's assignments.

Payer Code Table

The Payer Table includes Washington State assigned payer codes and names. These are:

001 Medicare

002 Medicaid (DSHS) (Healthy Options)

004 Health Maintenance Organization (HMO) (e.g. Group Health, BHP, Kaiser Foundation)

006 Commercial Insurance (e.g. Mutual of Omaha, Safeco)

008 Workers Compensation (includes state fund, self insured employers, and Labor and Industries crime victims claims)

009 Self Pay

610 Health Care Service Contractors (e.g. Premera Blue Cross, KPS)

625 Other Government Sponsored Patients (e.g. TRI-CARE, Indian Health)

630 Charity Care

For a listing of Health Care Service Contractors and HMOs registered with the State Insurance Commissioner see Appendix L.

Zip Code Table

The Zip Code Table contains all valid United States Zip Codes. The Zip Code Table is updated quarterly by the contractor. Foreign countries are identified by the first five letters of the country's name. On the Standard Reports all non-Washington zip codes are identified as "Other." The confidential data set includes the five plus four digits (when submitted) and the public data includes five digits. Both include the first five letters of the name of a foreign country.

There are approximately 43,000 zip codes in the national file including continental United States, Military, and Possessions and Territories.

MCE and DOH Audits

Both MCE audits and the department's audits are utilized. The assigned number of MCE and the department's audits and descriptions are included in the Table. (See Appendix G.)

The tables are utilized as a base for editing, validating and report production. The tables are maintained and reviewed annually or as need dictates.

Processing Volumes

The Revenue Code file contains approximately 470 codes.

There are approximately 11,790 diagnosis codes.

There are approximately 3,300 diagnoses listed as complications or comorbidities (CC).

There are approximately 3,700 procedure codes.

There are five PRE MDC and 25 MDC categories.

There are 511 DRG categories.

CMS may make changes annually (October 1) to the diagnosis codes, CC list, procedure codes, DRG classifications and MDC categories.

The Payer Table contains nine categories.

There are 17 categories Medicare Code Edits.

There are 60 department edits.

Summary of CHARS Data

Following is a table listing the CHARS Data Year, Number of Discharges, Average Length of Stay (ALOS), Total Charges, Charge per Discharge, and Charge per Day.

Year	Number of Discharges	ALOS	Total Charges	Charge per Discharge	Charge per Day
1985	528,537	5.1682	1,615,521,672.00	3,144.03	808.30
1986	539,661	5.2517	1,796,013,358.00	3,525.27	616.55
1987	526,632	5.2370	1,950,915,943.93	3,879.77	741.62
1988	527,508	5.2352	2,247,544,633.46	4,435.20	845.20
1989	528,593	5.1273	2,504,660,431.28	4,945.22	962.80
1990	543,193	5.0107	2,881,836,570.24	5,566.96	1,106.38
1991	543,188	4.9469	3,243,682,187.23	6,250.34	1,259.69
1992	549,645	4.7453	3,586,424,354.30	6,814.80	1,429.50
1993	537,110	4.4732	3,754,370,097.24	7,284.44	1,620.86
1994	520,540	4.1606	3,690,788,215.53	7,375.32	1,764.81
1995	523,711	4.0400	3,825,459,066.57	7,576.73	1,863.70
1996	523,672	4.0000	3,968,483,907.61	7,846.39	1,944.23
1997	536,739	4.0054	4,251,822,282.43	8,119.53	2,008.97
1998	540,421	3.9982	4,686,558,727.56	8,879.94	2,203.19
1999	549.700	4.0439	5,258,321,568.80	9,779.29	2,403.05
2000	573,978	4.0463	6,122,175,874.97	10,888.53	2,675.54

Summary of the CHARS Data by years and the CMS Grouper Version assigned

DRG and MDC Assignment and CMS Grouper used for CHARS Data

Year	Grouper Version	
1985	2.0	
1986	2.0	
1987	4.0	
1988	5.0	
1989	6.0	4th Qtr 7.0
1990	7.0	4th Qtr 8.0
1991	8.0	4th Qtr 9.0
1992	9.0	4th Qtr 10.0
1993	10.0	4th Qtr 11.0
1994	11.0	4th Qtr 12.0
1995	12.0	4th Qtr 13.0
1996	13.0	4th Qtr 14.0
1997	14.0	4th Qtr 15.0
1998	15.0	4th Qtr 16.0
1999	16.0	4th Qtr 17.0
2000	17.0	4th Qtr 18.0

Average Length of Stay, DRG Relative Weights, Statistical Outliers and Case Mix Indices

Weights are calculated using the DRG Version in effect during the last quarter of the year for the year being processed.

1985	2.0	
1986	2.0	85 & 86 recalculated using Ver 4.0
1987	4.0	86 & 87 recalculated using Ver 5.0
1988	6.0	
1989	6.0	Not calculated for 1989, used 88 weights
1990	8.0	
1991	9.0	
1992	10.0	
1993	11.0	
1994	12.0	
1995	13.0	
1996	14.0	
1997	15.0	
1998	16.0	
1999	17.0	
2000	18.0	

Refined DRGs, RDRG Weights and CMS Grouper Version

1992	10.0
1993	11.0
1994	12.0
1995	13.0
1996	14.0
1997	15.0
1998	16.0
1999	17.0
2000	18.0